# With Regards to the Bogus Papers Submitted to WMSCI 2005

Prof. Nagib Callaos
Founding President of the international Institute of Informatics and Systemics (IIIS)

www.iiis.org/Nagib-Callaos

## **Brief Description**

WMSCI 2005's Organizing Committee received several bogus papers. Some of them were randomly generated. In fact, one of them was detected by one of its three reviewers and it was refused. We had no reviewing feedback for the second one. By the acceptance deadline we had a low percentage of papers from which we had no evaluations. These papers could not be accepted and could not be refused. We believe that it is unfair to refuse a paper that was not refused by any of its three selected reviewers. So, we decided to communicate the respective authors that we had no reviews yet of their paper and due to this the acceptance was stated as a NON-REVIEWED paper. We were very clear that the paper had not been reviewed, and we were explicit about it. *The non-reviewed acceptance was based on the Curricula Vitae of the authors who were MIT's PhD students with adequate publication records.* The possibility of non-reviewing acceptance was stated in the Conference web page. It is not unusual to accept invited papers or invited talks which are based on the author's CV. Furthermore, WMSCI Conferences have been multi- and inter-disciplinary, so we tried to adapt to the different standards used in different disciplines included in the Conference.

We will first provide some *facts* regarding our acceptance of a non-reviewed paper, and then we will describe the *reasoning* we had for our acceptance policy in 2005 and for our present acceptance policy.

In the last section we will briefly describe the 3-tier reviewing methodology we have been applying for peer reviewing of *all* articles submitted to conferences and symposia organized by the International Institute of Informatics and Systemic (IIIS). This methodology combines the traditional double-blind reviewing, with non-blind reviewing, and participative peer-to-peer reviewing. To accept a submitted article, a *necessary condition* (though *not a sufficient one*) is to be recommended by a majority of its 5-8 randomly selected reviewers. The submitted article should also be recommended for its acceptance by the majority of the non-blind reviewers in order to be selected by the respective Organizing committee. Participative peer-to-peer supports the decision process when there is no majority recommending the acceptance, or the refusal, of a submitted article. More details regarding this issue could be found in the last section of this document, and in the conferences web sites.

#### **Facts**

- 1. For several years, and especially in 2005 and 2006, we have received bogus papers.
- 2. Two of the bogus papers we received in 2005 were randomly generated. Based on the feedback we got from the respective reviewers, we sent a notice of non-acceptance (refusal) to the author of one of the two papers<sup>1</sup>.
- 3. By the acceptance deadline, we had no reviews for about 10% of the submitted papers, so while we could get some feedback from the reviewers, we sent NON-REVIEWED acceptances to those authors who had good publication records. The Non-Reviewed acceptance status would change to a Reviewed acceptance if, after the acceptance deadline, we received recommendations from the respective reviewers to accept the paper.
- 4. The acceptance of the randomly generated paper was not based on its review but on the publishing record of the authors (three MIT Ph.D. students); which was, in our opinion, a good one. The acceptance email sent to the three authors stated clearly that we "have not received any reviews yet" of the paper they submitted which "has been accepted, as a Non-Reviewed paper." To those who enquired about a possible change in the status of their paper we informed them that the status of the acceptance of their paper can change from Non-Reviewed to a Reviewed one as soon as we receive recommendations to accept it from the reviewers assigned to their respective paper. "
- 5. This part of the acceptance policy was explicitly stated in the Conference web site. We clearly stated that "If the reviewers selected for reviewing a given paper do not make their respective reviews before the papers' acceptance deadline, the Selection Committee may accept the paper as a Non-Reviewed paper." So, we did nothing that we were not saying clearly and explicitly up front. Even though we still believe that the policy of accepting a small percentage of Non-Reviewed papers is an adequate one (we present below the reasoning supporting this issue), we removed it from our acceptance policy since 2006 up to the present.
- 6. Since WMSCI has always been announced as a Multi- and inter-disciplinary Conference, one of our main objectives was, and thus far is, to gather, in the same place, different kinds of disciplines with different kinds of reviewing processes and acceptance policies; we thought, and we still think, that there is nothing wrong

<sup>2</sup> We included in "Appendix B" a copy of the email we sent the authors regarding the acceptance of their presentation at the Conference but with a Non-Reviewed status of their paper.

We included in "Appendix B", a copy of the web page in the Conference site where we made this statement. This page can also be found in the Internet Archive at

http://web.archive.org/web/20070209005032/www.iiisci.org/sci2005/website/papers acceptance.asp

<sup>&</sup>lt;sup>1</sup> We included in "Appendix A" a copy of the email we sent refusing one of the two randomly generated bogus papers.

<sup>&</sup>lt;sup>3</sup> Below, we will describe the reasoning supporting our past policy of accepting a small percentage of Non-Reviewed papers, as well as the objective we were trying to achieve with this acceptance policy ingredient.

<sup>4</sup> We included in "Appendix B", a copy of the web page in the Conference site where we made this

mixing both kinds of presentations (REVIEWED AND NON-REVIEWED) in the same conference, especially if the Non-Reviewed ones are just about 10-12%. With these conditions it is easy to pass a bogus paper, because it might be accepted as a Non-Reviewed one.

- 7. It is a fact that we accepted a Non-Reviewed paper and our acceptance was based on the authors CVs. It is also a fact that Elsevier accepted and published a paper as REVIEWED, in their very prestigious *Journal of Applied Mathematics and Computation* which was also randomly generated.<sup>5</sup>, 6 "The paper was subsequently removed when the publishers were informed that it was a joke paper" (Wikipedia). If this fact has any meaning is not about the quality of the prestigious Elsevier's *Journal of Applied Mathematics and Computation*, but about the effectiveness of Peer-Reviewing or Peer-Refereeing of scientific articles. "Only 8% agreed that 'Peer Review works well as it is'," according to a survey made to the members of the Scientific Research Society.<sup>8</sup> "A recent U.S. Supreme Court decision and an analysis of the Peer Review System substantiate complaints about this fundamental aspect of scientific research. Far from filtering out junk science, Peer Review may be blocking the flow of innovation and corrupting public support of science." If just 8% of scientists agreed that 'Peer Review works well as it is' The U.S. Supreme Court decided that it does not filter out junk science, and in both cases honesty and trust are taken for granted, let alone what might happen when authors are breaking the trust that editors, conference organizers, publishers and reviewers are having in scientists.
- 8. It is also a fact that an increasing number of prestigious conferences, some of which were organized by IEEE accepted bogus papers, including randomly generated ones. Again, this does not necessarily mean that IEEE Conferences are of low quality. It means that Peer Review has its weaknesses which are significantly amplified when deception is used by authors. Hopps, in an article titled "Peer Review: A Trust, Not a Vault" asserts that the submission of spurious manuscripts to evaluate a journal-review process is an example of "violation of trust between journal and author." David Lazarus, former Editor-in-Chief of the American Physical

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<sup>&</sup>lt;sup>5</sup> "Students at Iran's Sharif University of Technology published a paper in the Journal of Applied Mathematics and Computation (which is published by Elsevier... The paper was subsequently removed when the publishers were informed that it was a joke paper." (Wikipedia)

<sup>&</sup>lt;sup>6</sup> The accepted and published paper can be found at <a href="http://ce.sharif.edu/~ghodsi/soft-group/misc/AMC-paper.pdf">http://ce.sharif.edu/~ghodsi/soft-group/misc/AMC-paper.pdf</a>

<sup>&</sup>lt;sup>7</sup> The removal of the paper after being published can be found at <a href="http://www.sciencedirect.com/science?">http://www.sciencedirect.com/science?</a> ob=ArticleURL& udi=B6TY8-4N987X7K& user=10& rdoc=1& fmt=& orig=search& sort=d& docanchor=&view=c& acct=C000050221& ve rsion=1&\_urlVersion=0&\_userid=10&md5=2f32e7e7caacf32704c05c2d0d6cd13a

<sup>&</sup>lt;sup>8</sup> Chubin, D. R. and Hackett E. J., 1990, *Peerless Science, Peer Review and U.S. Science Policy*; New York, State University of New York Press.

<sup>&</sup>lt;sup>9</sup> Horrobin, D., 2001, "Something Rotten at the Core of Science?" *Trends in Pharmacological Sciences*, Vol. 22, No. 2, February 2001. Also at <a href="http://www.whale.to/vaccine/sci.html">http://www.whale.to/vaccine/sci.html</a> and <a href="http://post.queensu.ca/~forsdyke/peerrev4.htm">http://post.queensu.ca/~forsdyke/peerrev4.htm</a> (both pages were accessed on February 1, 2010)

<sup>&</sup>lt;sup>10</sup> Hopes. J G., 1989, Peer Review: A Trust, Not a Vault. *Social Work*, 34, p.3; referenced in Speck, R. L., 1993, *Publication Peer Review: An Annotated Bibliography*, Westport, Connecticut, Greenwood Press; p. 97 (emphasis added).

Society<sup>11</sup>, emphasized that "...**the peer-reviewed system's being of finite value,** particularly when used deceptively...We [in the Physical Review] rely on the honesty and integrity of our authors – and their own self-selection of the quality of the papers they send us – as much as on our referees and editors, to ensure the quality of our journals." We had a similar perspective of the publishing of academic papers. It is sad, very sad, that this perspective has to be reviewed.

- 9. If we are to assess the effectiveness of our reviewing process it is necessary to have in mind the fact that we accepted a non-reviewed paper but there are reports that several reputable conferences did accept bogus papers, including some randomly generated, as reviewed ones. For example, in the same blog where we were attacked, one of the bloggers (Mikero) reported on April 14, 2005 at 12:11 AM that "In the recent IEEE Conference in Boston, my team from the University of Colorado published 6 JUNK Papers. Shame on IEEE." 13 This means that BEFORE we accepted a paper as a nonreviewed one, IEEE accepted six bogus papers as reviewed. This is just an example of how many hoax papers are accepted at conferences and journals. Lance Fortnow (professor of Computer Science at The University of Chicago, editor of four journals and Program Chair of several IEEE, ACM, etc., Conferences in Computer Science) affirmed that "virtually none of the conferences in computer science fully referee their submissions. A clever student could write a paper with a bogus proof and have a chance of that paper being accepted at a major conference like STOC."14 Commenting the bogus papers we received from several MIT PhD students, professor Lance Fortnow added that "I would consider someone who intentionally submits a bogus paper to STOC guilty of academic fraud. Why are these MIT students any different?", 15
- 10. Two of the MIT PhD students who submitted the bogus papers co-authored at least one paper with Robert Morris who "unleashed a worm on the Internet that infected between 6,000 and 9,000 computers, overloading the entire Internet and causing many servers to fail as a result... Morris was convicted and sentenced to three years of probation and 400 hours of community service as well as a \$10,000 fine. This was a seminal incident in the history of Internet security that led directly to the founding of the CERT/CC a month later. This worm may have been an honest mistake, as we

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<sup>&</sup>lt;sup>11</sup> The American Physical Society publishes The Physical Review, Physical Review Letters and Review of Modern Physics.

<sup>&</sup>lt;sup>12</sup> Lazarus, D, 1982, Inter-referee agreement and acceptance rates in physics, *The Behavioral and Brain Sciences*, 5, No. 2, June 1982; p. 219 (emphasis added)

<sup>&</sup>lt;sup>13</sup> <a href="http://3dpancakes.typepad.com/ernie/2005/04/academic spam a.html">http://3dpancakes.typepad.com/ernie/2005/04/academic spam a.html</a> (The last time we accessed this web page was on January 1<sup>st</sup>, 2010)

<sup>&</sup>lt;sup>14</sup> As it is known, STOC (The Annual ACM Symposium on Theory of Computing) is one of the most prestigious conferences in Computer Science.

<sup>15</sup> http://weblog.fortnow.com/2005/04/fine-line-between-prank-and-fraud.html (The last time we accessed this web page was on January 1<sup>st</sup>, 2010.)

<sup>&</sup>lt;sup>16</sup> Jinyang Li, Jeremy Stribling, Robert Morris, M. Frans Kaashoek and Thomer M. Gil "A performance vs. cost framework for evaluating DHT design tradeoffs under churn", accessed on December 1<sup>st</sup>, 2010 at <a href="http://pdos.csail.mit.edu/~strib/docs/dhtcomparison/dhtcomparison-infocom05.pdf">http://pdos.csail.mit.edu/~strib/docs/dhtcomparison/dhtcomparison-infocom05.pdf</a>

To Computer Desktop Encyclopedia: *Morris worm*, <a href="http://www.answers.com/topic/morris-worm">http://www.answers.com/topic/morris-worm</a>; which has been accessed on January 1<sup>st</sup>, 2010.

think it was, but the harm was already done, as it might be the case of the bogus papers sent by the three MIT students.

- 11. Many prestigious conferences ask potential authors to submit abstract or extended abstracts. Reviewers make their recommendations and acceptances or refusals according to these submitted abstracts. Once an abstract is accepted the final version of the paper is not screened or reviewed again. This is the procedure that conference organizers follow, and it is a fact. Based on these usual procedural standards, some dishonest authors submitted the final version of their papers with a different content than that of the accepted abstract with the intension of deceiving and embarrassing conference organizers and/or the publishers of their proceedings. One representative example of this kind of dishonest deception is the "paper" published by IEEE's Xplore.
- 12. An increasing number of reputable publishers are accepting and publishing randomly generated papers. This is best evidence that the traditional double-blind peer-reviewing methodology has not been effective or is not affective any more with the new advances in publishing technologies and are more vulnerable to the potential unethical behavior of both authors and reviewers. Some of the latest examples are the followings:
  - a. *Nature* reported that "The publishers Springer and IEEE are removing more than 120 papers from their subscription services after a French researcher discovered that the works were computer-generated nonsense." <sup>18</sup>
  - b. The journal *Advances in Pure Mathematics* accepted for publication a randomly generated article produced by Mathgen<sup>19</sup> (Randomly generated mathematics research papers!)<sup>20</sup>

Since 2006, all fake papers we received were identified by our two-tier methodology which is described with more details at <a href="http://www.iiisci.org/journal/sci/Methodology.pdf">http://www.iiisci.org/journal/sci/Methodology.pdf</a> and <a href="http://www.iiis.org/acceptance-policy.asp">http://www.iiis.org/acceptance-policy.asp</a>. Consequently we certainly might hypothesize that our present two-tier hybrid peer-reviewing methodology has been more effective than the traditional double-blind peer-reviewing.

Participants of our past conferences know firsthand the quality of our conferences. However, some scholars that did not participate in our past conferences may start perceiving the conference wrongly or may start having doubts about it. In the case of these scholars, the harm has already been done. Sooner or later the truth will be known, as it is expected in any scientific activity.

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<sup>&</sup>lt;sup>18</sup> The respective paper can be found at <a href="http://www.nature.com/news/publishers-withdraw-more-than-120-gibberish-papers-1.14763?WT.mc">http://www.nature.com/news/publishers-withdraw-more-than-120-gibberish-papers-1.14763?WT.mc</a> id=TWT NatureNews

<sup>&</sup>lt;sup>19</sup> A brief description can be found at <a href="http://thatsmathematics.com/blog/mathgen">http://thatsmathematics.com/blog/mathgen</a>

<sup>&</sup>lt;sup>20</sup> More details at <a href="http://www.lrb.co.uk/blog/2012/10/17/paul-taylor/stochastically-orthogonal/">http://www.lrb.co.uk/blog/2012/10/17/paul-taylor/stochastically-orthogonal/</a>

#### Reasoning Supporting our Acceptance Policy in Year 2005 and since Year 2006

- 1. We handled about 10.000 reviews and just one bogus paper was accepted as a non-reviewed one. I think this is not worse than IEEE accepting and publishing 8 bogus papers (according to the blogger mentioned above) and the Bogdanoff brothers achieving the acceptance of two Ph.D. dissertations, especially if you take into account that we did nothing that was not clearly and explicitly written in our Conference web page. In the worst case, we might have had an inadequate acceptance policy, mixing two very used policies in the same Conference. We might have made a judgmental mistake, but an honest mistake because everything was said upfront in the Conference web site since the beginning of the organizational process. Consequently, if there was any dishonest act it was definitely not ours. This is why we can sleep at night with our human and academic conscience in peace. I am not sure the same could be said about those who are playing with people's reputation via deceptive acts.
- 2. We trusted authors making submissions because, as long as I understand, science and engineering are based on trust. We might have made a judgmental mistake regarding this issue. We might have confused science with scientists (or science apprentices); we might have confused engineering with engineers. The fact that the scientific enterprise is based on trust does not imply that all scientists can be trusted. We did nothing that was not clearly and explicitly said, from the beginning of the organizing process, in the Conference web site. We did not do any deception, and this is an objective fact; but we were deceived, and this is also an objective fact. We were unjustly treated with conclusions derived from part of the truth, but we believe in Universal Justice by which the whole truth will be known sooner or later.
- 3. Meanwhile, we reviewed, and we are still reviewing, our Acceptance Policy. One of the main changes we made is to have a two-tiers reviewing process: a closed, double-blinded one (as we did in the past) and an open, not-blinded process. Acceptance decisions will be based on both kinds of reviewing. In this way we will be free to publish the comments of those reviewers who did the open review, in case we have a similar act of deception again.
- 4. In spite of all the half truths and the smears (like saying that our Conference is a bogus one) that circulated regarding our Conferences, we had about 1400 scholars/researchers who participated in our last Conference, along with its collocated ones. We renewed 100% of our Program Committee, and about 400 scholars/researchers accepted to participate in the PC of the WMSCI 2006 and about 2500 accepted to participate as additional reviewers. Since 2006 most of the Program Committee's members are authors of sessions' best papers of past conferences, and about 18.000 additional reviewers were accepted after they have been proposed, verified, and validated. By the year 2011, about 4000 scholars, researchers, and professional registered as members of the IIIS. All these researchers and professionals know firsthand the quality level of our conferences, because some of them have been working with us for about 15 years, and many of them were co-editors of the approximately 140 different hard copy volumes (containing an average of 500 pages

each volume) we have published up to the present as Proceedings of our Conferences. I am willing to send you, or to the library of your organization, the 12 first issues of our journal where we are publishing the best 10% of the papers presented at our Conferences. You can check the electronic version of the Journal at <a href="http://www.iiisci.org/Journal/SCI/">http://www.iiisci.org/Journal/SCI/</a>. You can also check the participants and the organizers of our past Conferences at <a href="http://www.iiis.org/jiiis">http://www.iiis.org/jiiis</a>

Several conferences that announce the possibility of reviewed and non-reviewed papers simultaneously can be found on the Web. Authors of non-reviewed papers, as well as invited papers, have complete responsibility of the content of their paper. Indeed, there are prestigious conferences that accept papers with an abstract of no more than 50 words, so there is no full paper reviewing before accepting the paper.

Our Conferences are not oriented just to research papers, but also to position papers, invited papers, invited session's papers, panels' presentations, etc. This has been clearly and explicitly stated in the Conferences' call for papers. This is one of the reasons why we did not use in the past the phrase of "refereed proceedings". But, in the last years we implemented two-tier reviewing processes combining double-blind and non-blind reviewing.

In the automated support system for the reviewing process we used up to the 2005 Conference, a computer program selects at random three reviewers for each paper (lately we are assigning between **five and eight reviewers at random** in the same area where the author classified his/her paper). If by the acceptance deadline we have not received reviewing feedback for a given paper, the program sends a reminding message to the selected reviewers and selects one additional or more reviewers for the same paper. We do this in order to avoid human intervention in the selection of the reviewers. We were aware about some bogus papers we had in the past, and we were trying to find ways to eliminate, or at least minimize, the probability of this kind of situations.

Every year, and especially in 2005 and 2006, we have been receiving bogus papers and a variety of malicious hacking on our Conference web sites. They were hacked frequently and continuously in the last few months before the 2005 collocated conferences. In fact, some files were even cracked, moved, deleted, changed, etc. We had to stop the organizing process of some symposia and conferences, disabling the link of the menu's option related to "papers submission" because of the quantity of bogus papers that were being sent.

By now, the quality level of WMSCI Conferences has been tested for about 15 years by their participants who, in many cases, congratulated the Organization and the Program Committee.

In our opinion, and it has been our experience, the acceptance of a small percentage of Non-Reviewed papers does not significantly decrease the quality level of a conference, in fact, it could well increase the probability of not refusing a good paper with a content differing from established paradigms. Different kinds of reasoning can be found in the specialized literature on the subject, explaining why non-reviewed papers might be, and

even should be, accepted. Robin and Burke (1987, Peer review in medical journals. 91(2), 252-255), for example, affirms with regards to journals, that "Editors should reserve space for articles...that receive poor review...they should publish unreviewed material..." (In A. C. Weller, 2001, **Editorial Peer Review, Its Strength and Weaknesses**, p.317).

It was established for the Database PubMed Central (following suggestion made by Harold Varmus, then Director of the National Institute of Health: NIH) that "the non-peer-reviewed reports will also enter PubMed Central...reports may never be submitted to a Journal for a traditional peer review, yet will be deposited in PubMed Central..." (Weller, 2001, **Editorial Peer Review, Its Strength and Weaknesses,** p.320).

Gordon (1978, Optional published refereeing. Physics Today, 31(10), 81) championed the idea of adopting an optional published refereeing where "the publication of almost everything will be guaranteed with the requirement that referees' comments be published along with the articles." (Weller, 2001, **Editorial Peer Review, Its Strength and Weaknesses**, p.317).

These are a few examples with regards to what is supposed to be the most formal reviewing, which is the journals' one. Being almost unanimously accepted that conferences reviewing is informal or non-formal because the inherent time restrictions and the timeliness objective of these kinds of publications, then we think it is legitimate and academically respectful to accept non-reviewed papers, especially if we take into account that in the call for papers in our Conferences it has always been clearly stated that we accept NON-RESEARCH papers submissions, as it is the case of position papers, invited papers, case studies, panels' presentations, reports, etc., which are usually accepted, or not, on a non-reviewing base. This policy with regards to papers submissions is a direct consequence of the essential stated purpose of the Conference with regards to bringing together researchers and practitioners, and to be "an international forum for scientists and engineers, researchers and consultants, theoreticians and practitioners in the fields of Systemics, Cybernetics and Informatics [where] participants from academies, governments, and industries share ideas and experiences among different disciplines." To achieve this objective it is necessary to accept research and non-research papers, as well as reviewed and non-reviewed papers.

Furthermore, there is a general understanding that even in the scientific/technical communication, "formal communication is not the only means of communicating ideas within the scientific/technical community. "The formal media may be the more permanent means of recording ideas but are only part of the overall enterprise. [The formal media] are complemented by informal, but well established means of exchanging ideas. The formal media are also not all equally formal. In addition...at least three of [the non-formal media] - patents, technical reports and conference proceedings - are sometimes considered fugitive forms of scientific/technical literature...The informal exchange of information among colleagues is much more important at certain periods of the research process than the formal media...along the informal-formal continuum, conference papers may rest at or near the middle...papers presented at conferences may not have gone through the same development or review process as that required of the journal article...the conference is the place for highlighting research effort before

publication in a journal. In others, it is a place where ideas are tested, a place to distribute research results or the place to claim priority... National societies in the same discipline often sponsor international conferences in order to encourage both informal and formal exchange of ideas." (Walker and Hurt, 1990, **Scientific and Technical Literature**, American Library Association, pp. XX, 79-80) And this is what we have been trying to do. Due to this, we have been encouraging, since the beginning, the submission of different kinds of papers: research, reports, review papers (tutorials), case studies, position papers, etc.; abstracts and full papers. Due to this we have been trying to bring together to the same Conference, researchers and practitioners, academics and professionals.

Because of this we preferred not to use the phrase "refereed proceedings" to refer to our Conference Proceedings. Weller (2002, **Editorial Peer Review**, p. 15), for example, states that "Since editorial peer review is a process, its definition can and does vary according to how the process in envisioned." There is a general obvious definition: "evaluation by one's peers", but the meaning of "one's peers" differs according different editorial policies and according different universities' regulations.

Pettigrew and Nichols state explicitly the ambiguity of the term: "Refereed journal' is not a precise term, but rather covers a continuum of peer/controlled quality assessment that reaches its most strict definition with double-blind peer review by several scholars working in the research area, and a minimal ability of the editor to override clear decisions by the peer reviewers" (Pettigrew and Nichols, 1994, Publication Patterns of LIS Faculty from 1982-1992: Effects of Doctoral Programs. *Library and Information Science Research*, 16, 139-156.) So, depending on the meaning of "minimal ability" the same journal's editorial policy may be considered as "peer reviewed" or "not-peer reviewed". Since conference proceedings reviewing is less formal than the journal reviewing process, or informal, then the imprecision of the term is significantly higher.

DeBakey (1990, Journal peer reviewing. Anonymity or disclosure? *Archives of Ophthalmology*, 108(3), 345-349) asked "is a reviewer of a manuscript…always a peer: a person who has equal standing with another, as in rank, class or age?" So, according to this definition of peer (equal standing of academic rank, for example) we are definitely not making "peer reviews", and this kind of "peer reviews" is definitely not the base of our paper acceptance policy. We have no feasible way of knowing if the reviewers have the same academic ranks as those of the authors of the paper being reviewed.

After examining several definitions of the phrase "peer-reviewed journal", Weller (2002, **Editorial Peer Review**, p. 16) states that "These definitions contain a common element in that they each require some type of review of a manuscript other than the editor. Some definitions are more prescriptive than others, incorporating the number of processes and requirements. **These definitions do not address such issue as the percentage of material in a journal that should be peer reviewed**, or many other details of the process." Weller consequently makes a definition which is "intended to be as inclusive as possible." Accordingly, she states that "A peer-reviewed journal is one that has a portion of submitted manuscripts evaluated by someone other than the editor of the journal." Again, this is a very elastic definition because it depends on the magnitude of the

"portion" of submitted manuscripts evaluated by someone other than the editor of the journal. An acceptable "portion" for a given journal, or a given university, might be completely unacceptable for another. And, if we take into account that conferences proceedings reviewing are less formal that those of journals (or informal), that some (or all, depending on the conference) of the paper acceptances are based on abstracts, and not on full papers, and that a percentage of the papers might be accepted as non-reviewed ones, then the level of imprecision of the definition increases meaningfully.

Consequently, being prudent and cautious with regards to what the term may mean to different scholars and practitioners, we preferred not to use the phrase Peer Reviewed Proceedings" or "Refereed Proceedings" in our Conferences. We did say that "Submitted papers will be sent to reviewers." And we did send the submitted papers and abstracts to at least three reviewers in order to: 1) identify the best 10% of the papers presented at the Conference in order to invite their authors to make possible modifications and extensions for their publication in the Journal, as it was stated in the Call for Papers of the Conference; and 2) identify the next best 10% of the papers, which along with the Sessions' Best Papers (selected by the Session Chair) would go to another reviewing process to be done by the Journal's reviewers, in order to select the best 30% of them. With this policy, non-reviewed good papers still have the possibility of being published timely in the Conference Proceedings, and later in a Journal, with a more formal reviewing. We think that, in this way, we are diminishing the probability of refusing good papers. It is known from several studies that papers that had been refused by a journal, were accepted for their publication in another one, and then became some of the most cited papers. Accordingly, we have had no target for a minimum of refusals for the Conference Proceedings but we do have a stated target for the related Journal.

### Non-Blind (Open) and Double-Blind (Closed) Reviewing in IIIS Conferences

The conferences organized by the International Institute of Informatics and Systemics (IIIS) have, in their peer reviewing methodology, three-tier reviews: open (or non-blind), double-blind, and participative reviews. Final acceptance depends of the three kinds of reviews but a paper should be recommended by non-blind reviewers AND blind reviewers in order to be accepted for presentation at the conference and to be included in the respective conference proceedings. A recommendation to accept made by non-blind reviewers is a **necessary** condition, but it is not a **sufficient** one. A submission, to be accepted, should also have a majority of its double-blind reviewers recommending its acceptance. This double necessary conditions generate a **more reliable and rigorous** reviewing than a those reviewing methods based on just one of the indicated methods, or just on the traditional double-blind reviewing.

Double-blind reviewing is done by a random selection of a 3-5 reviewers from the about 20.000 IIIS reviewers who classified their research or expertise field in the same theme, area, or subarea where the author classified his/her submission. The random selection (made by a computer program) has been conceived in order to avoid any conscious, or

un-conscious, bias that might be done by a human being selection of the respective reviewers.

IIIS' non-blind reviewing is based on the essence of what Kaplan (2005, "How to Fix Peer Review", *The Scientist*, Volume 19, Issue 1, Page 10, Jun. 6) proposed in order to fix peer reviewing problems. Kaplan affirms that "Peer review subsumes two functions. First, peer reviewers attempt to improve manuscripts by offering constructive criticisms about concrete elements ... The second function of peer review is to render a decision about the ... significance of the findings so that the manuscript can be prioritized for publication. I propose reforming peer review so that the two functions are independent." With regards to the first function of peer reviewing Kaplan proposes that "Review of a manuscript would be solicited from colleagues by the authors. The first task of these reviewers would be to identify revisions that could be made to improve the manuscript. Second, the reviewers would be mostly concerned with the significance of the findings, and the reviewers would sign it" (emphasis added).

IIIS tries to achieve the first function via Kaplan's non-blind peer reviewing and the second function by the traditional means of double-blind review. This is why submission acceptance by the non-blind reviewers is a necessary condition but not a sufficient one. The submission should also have favorable recommendations by the majority of the double-blind reviewers in order to be accepted by IIIS for its presentation and inclusion in the respective conference proceedings.

A third reviewing tier is the participative peer reviewing, which complements the two tiers described above but it is not a necessary condition for accepting a submission. An article submitted to a conference being organized by IIIS is immediately displayed for review to those authors who submitted articles in the same theme, area, or sub-area. Accordingly, each submitting author have access to all submission submitted to the same area where he/she submitted his/her article and can comment and evaluate any submitted article to the same area. This is what is called in IIIS "Participative Peer-to-Peer Reviewing" or PPPR. This kind of reviewing provides additional input to the selection process and assists all participants in placing their presentations in context.. It is not a necessary condition but it has a complementary function, especially in those cases where the non-blind reviewers have a strong disagreement and no majority of recommendations are for accepting or not accepting the respective article.

In some circumstances, component conferences may use a somewhat different approach to selecting blind referees (such as requiring reviews by program committee members), but the general process will remain the same. Invited sessions organizers may have their own reviewing methodology.

# Appendix A

Copy of the email sent with regards to the Non-Acceptance (refusal) of one of the two randomly generated bogus papers submitted to WMSCI 2005

From: "WMSCI 2005 System" < SCI05.System@iiis.org>

To: <wmsci2005@thomer.com>

Sent: Sunday, April 10, 2005 2:53 PM

Subject: Regarding your WMSCI 2005 paper submission

Dear Mr. Thomer GIL,

We are sorry to inform you that your paper entitled: "The Influence of Probabilistic Methodologies on Networking", is not among the papers that have been accepted for their presentation in WMSCI 2005 and inclusion in the conference proceedings. We hope we can have other papers of yours among the accepted ones in future conferences.

Best regards,

Prof. Nagib Callaos WMSCI 2005 General Chair

#### Appendix B

From: "WMSCI 2005 System" < SCI05.System@iiis.org>

To: <jstribling@gmail.com>

Sent: Friday, March 25, 2005 10:55 PM Subject: WMSCI 2005 Paper Acceptance

### \*\*\* PLEASE DO NOT REPLY TO THIS E-MAIL ADDRESS \*\*\*

This is a system e-mail account. So, this mailbox is not monitored for responses. Mail sent to this address cannot be answered.

Dear Mr. Jeremy STRIBLING

On behalf of the Organizing Committee, we would like to inform you that, up to the present, we have not received any reviews yet for your paper entitled: "Rooter: A Methodology for the Typical Unification of Access Points and Redundancy". So, your paper has been accepted, as a non-reviewed paper, for presentation at the 9th World Multiconference on Systemics, Cybernetics and Informatics (WMSCI 2005) to be held in Orlando, USA, on July 10-13, 2005. We will inform you about the conference program, including your presentation, once the timetable is finalized.

If you submitted your paper several times, and our staff did not detect the repetition of the same submitted paper, then your paper might have been sent several times for its review, and it has several IDs. In this situation you may have received (or may receive) a regular acceptation. In such a case, please discard this present acceptance e-mail and be sure to always use the paper ID number we gave you in the e-mail where we accepted you paper as an appraised one. Otherwise, your paper will be included in the Proceedings as a non-reviewed paper.

Each accepted paper (reviewed and non-reviewed) is candidate for being best paper of its respective session and, consequently, it is candidate for a second reviewing process to be made by the reviewers of the Journal of Systemics, Cybernetics and Informatics (JSCI), by means of which the best 10%-20% of the papers presented at the Conference will be selected and published in the JSCI after making possible modifications (in content/format) and extensions as to adequate them to a journal publication.

You can download the authors' kit (PDF format) from the Conference web site (<a href="http://www.iiisci.org/sci2005">http://www.iiisci.org/sci2005</a>). It includes the following: the Instructions for Authors, the Author Guide for Preparing a Proceedings Paper, the Copyright Transfer Form, the Speaker's Biographical Sketch and Hotel information.

To submit the electronic version of your camera-ready paper, via the Conference web site, you will need to enter the paper ID number and a password. To send the electronic version of the paper being accepted in this e-mail use the following:

Paper ID number: S280DM Password: S3007

Looking forward to see you at SCI 2005, next July.

Best Regards,

Prof. Nagib Callaos General Chair

# Appendix C

WMSCI 2005 web page where we stated our Acceptance Policy and where it was clearly and explicitly stated that "If the reviewers selected for reviewing a given paper do not make their respective reviews before the papers acceptance deadline, the Selection Committee may accept the paper as a Non-Reviewed paper." This web page can be found on the Internet Archive at

http://web.archive.org/web/20070209005032/www.iiisci.org/sci2005/website/papers\_acceptance.asp

