诚信的危机：学术出版的现状

Integrity Under Attack: The State of Scholarly Publishing

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尊敬的编委们，

如果这篇文章能够翻译成中文并且在中国出版发行，我将非常高兴。我正在计划取得国际同行的共同支持一起来应对这些问题，因此，中国同行的支持十分重要。

我已经收到好几次要求将此文翻译成不同文字的请求。事实上，该文已经被翻译成好几种语言了。美国工业与应用数学会及我本人都乐意授权给各国同行翻译此文。当然，我们希望翻译者（1）注明该文的原始出处；（2）附上原文的链接（可以在我的个人主页里找到）；（3）附上作者的简介。

非常感谢您们的协助！
Doug Arnold
美国工业与应用数学学会主席

Dear Editors:

I would be very pleased if the article were published in Chinese and disseminated in China. I am working on a plan for international action on some of these issues, and support by colleagues in China would be very valuable.

I have already gotten similar requests, and there are already translations into several languages. SIAM and I give permission with only the obvious minimal requirements, namely that you (i) State the source of the original article; (ii) Include a link to the original, which is posted at my website; (iii) Include a biographical note about the author.

Thanks, and best regards,

Doug Arnold,
President of SIAM

科技期刊的出版无疑非常重要，因为他们是传播和获得科研结果最重要的方法，也是与我们的健康、安全和发展息息相关的企业的重要组成部份。通常，大学、研究基金机构以及其它组织都将出版物作为衡量科学研究成效和影响的主要依据。此外，出版物不但在招聘、升职以及加薪等事宜中起决定性的作用，而且对一个学系，研究机构、甚至一个国家的科研排名也至关重要。正是由于出版物能带来如此多的利益，所以有些人在这方面有一些不道德的、违反学术规范的、或是明显的欺骗行为，也是意料之中的。然而，当我认真地调查这个问题时，我还是对调查结果感到十分震惊。在这个专栏里，我会举几个发生在应用数学领域里的作者或杂志的严重不当行为的例子。**我所得出的结论是：我们不应该过分依赖一些常用的文献计量学指标，比如杂志的影响因子或作者的被引用次数，来进行**

Scientific journals are surely important. They provide the most effective means for disseminating and archiving scientific results, and so are a key part of an enterprise on which our health, security, and prosperity ultimately depend. Publications are used by universities, funding agencies, and others as a primary measure of research productivity and impact. They play a decisive role in hiring, promotion, and salary decisions, and in the ranking of departments, institutions, even nations. With big rewards tied to publication, it is not surprising that some people engage in unethical behavior, abuse, and downright fraud. Still, when I started to look at the issues more closely, I was appalled by what I found. In this column, I give a few troubling examples of misconduct by authors and by journals in applied mathematics. One

排名或者判断。因为这些指标无论是在理论上，还是在实际中，都很容易被造假。

毫无疑问，美国工业与应用数学学会（SIAM）认为学术出版十分重要，而且我们也一直致力于保证它的出版物的声誉，以及防范其发表的成果遭到剽窃。一直以来， 我们也在想办法在这方面做得更好。因此，我恳请“工业与应用数学学会”的会员们一起来做好这件事。比如，如果你们发现了我们的期刊上有任何问题，请联系我；你觉得这些问题正在恶化吗？“工业与应用数学学会”应该在这方面做更多的事情吗？我们应该对自己的出版物和作者加强监管吗？

我们经常能发现学术作者的不当行为。这一类不当行为里，最常见的就是逐字逐句抄袭了，而 更“高明”的做法则是那些诸如把其它文章的主要想法偷偷搬来复制文章的行为。然而，“工业与应用数学学会”认为事情的严重性远不止此，更严重得多的是由于受到一些显然的利益驱动，一些出版社和编委也利用学术杂志进行不当的行为。比如**有些杂志看似十分规范，因为表面上它们也有专家评审程序。然而这些专家评审程序却十分草率，甚至一点也不严格。还有些杂志为了提高诸如影响因子等文献计量指标，故意增加自己的引用次数。**

最近发生了一启事关“工业与应用数学学会”期刊的抄袭事件。该事件同时涉及学术作者和杂志的不当行为。2008年在“工业与应用数学学会”的一个杂志上发表的一篇文章，其作者于文章正式发表之前在互联网上公开了文章的预印本。可是有人逐字抄袭了这个预印本，只改了一下文章题目和作者名，于同一年在《国际统计和系统期刊》（《International Journal of Statistics and Systems》）发表了。“工业与应用数学学会”的出版商、负责出版的副主席、执行主任以及我本人对此事进行了为期六个月的全面调查。随着调查的进行，我们发现该事件越来越严重。我们决定把整个调查结果公诸于世。读者可以在互联网上找到有关细节（见【1】）。

对于此事，我们还得出一些更糟糕的结论。我们把这些涉及抄袭行为的作者的一些文章找来仔细阅读，结果发

conclusion I draw is that common bibliometrics -- such as the impact factor for journals and citation counts for authors -- are easily manipulated not only in theory, but also in practice, and that their use in ranking and judging should be curtailed.

SIAM places great value on scholarly publishing, of course, and we are taking strong actions to ensure the integrity of our own publications and to protect our authors from theft of their work. But we are still struggling to decide just what actions we should take. So I invite the thoughts of members of the SIAM community. If you have witnessed troubling incidents in journal publication, let me know. Do you think such incidents are on the rise? Should SIAM be doing more? Should we look beyond our own publications and authors?

Author misconduct -- most obviously verbatim plagiarism, but also more subtle appropriation of ideas and duplicate publication -- has always been with us. At SIAM, however, our impression is that the problem is becoming far more common. Perhaps even more disturbing is journal misconduct, carried out by publishers and editors, often with an evident profit motive. One example is a sloppy or sham peer review process designed to produce the impression of a serious scholarly journal without the substance. Another is the deliberate manipulation of citation statistics in order to raise the impact factor or other journal bibliometrics.

A recent case involving SIAM brings in both author and journal misconduct. A paper published in a SIAM journal in 2008 was plagiarized essentially verbatim from a preprint version posted by the authors on the web. A copied version of the paper appeared in the International Journal of Statistics and Systems in the same year with different title and authors. SIAM's publisher, vice president for publications, executive director, and I undertook a full investigation, which required nearly six months. The case got messier and more disturbing week

现他们的抄袭行为远不止前面提到的这篇文章。他们至少有四篇发表在四个不同杂志上的文章是逐字抄袭他人的论文。这样的结果不得不让我们怀疑他们的其它文章也可能是抄袭的。刊登上述这篇抄袭论文的杂志是由印度研究出版社（Research India Publications）出版的。这个出版社同时出版大概50种杂志，其中大部份都与应用数学相关。然而，当我们就此抄袭事件与他们联系时，该出版社却没有给我们回应。我们与该杂志主页上列出的主编联系，可连这位主编都无法联系上该出版社！当这位主编知道了这件抄袭事件后，他随即向出版社提出了辞职。然而迄今为止，他仍然没有收到出版社的任何回复。在这个杂志的主页上，我们仍然可以看到他的名字以及很多知名的数学家的名字。

很多人都觉得《混沌、孤立子和分形》杂志（《Chaos, Solitons and Fractals 》，以下简称《混沌》杂志）这本由爱思唯尔（Elsevier）出版的应用数学杂志，就一直存在编委和杂志的不当行为。根据2008年《自然》上的一篇文章（见【2】）所说，该杂志仅十二月份这一期的36篇文章里，就有5篇是由该杂志的主编Mohamed El Naschie所写。而本年度到目前为止，他在这个杂志上已经发表了近60篇论文。事实上，在Web of Science收录的由这位主编撰写的400篇论文里，有307篇是发表在由他自己主编的这个杂志上。主编在自己负责的杂志上如此频繁地刊登论文，不得不让人怀疑这本SCI期刊根本就没有执行标准的同行专家审稿程序。而且，这样的行为也大大地提高了该杂志的影响因子。（Thomson Reuters 是根据“C 除以 A”这个公式来计算一个杂志在某年的影响因子的，其中A是该杂志在之前两年里发表的论文总数，而分子C是指该杂志两年的论文被它的数据库收录的并且在该年度发表的论文所引用的次数）。这位主编在他自己的这本期刊上发表的论文总共引用了4922篇论文，其中大概有2000次引文是来自他自己的这本期刊上的论文，这其中大部份还是他本人的论文。2007年，在Thomson Reuters所列的“数学及跨学科应用”这一类别的杂志排名里，《混沌》杂志在65种SCI期刊中排名第二。

另一个影响因子高得令人咂舌的杂志是2000年创刊的，由设在以色列的弗罗伊德出版社（Freund Publishing

by week. I decided that our final report on it should be made fully public; it is available on the web, where you can read the details (www.siam.org/journals/plagiary).

Meanwhile, here are some of the sad conclusions. Based on the papers that we reviewed, we determined that the suspect authors had committed plagiarism in this and various other cases. At least four articles published under their names in four different journals are essentially verbatim copies of the articles of other authors, and we have reason to believe that there are other cases as well. The journal publisher, Research India Publications, publishes nearly 50 journals, many related to applied mathematics, but did not respond to our inquiries about the plagiarized article. We contacted the editor-in-chief listed on the journal web page, but he himself has been unable to contact the journal! After learning about this incident from us, he submitted his resignation to the journal but has received no response from the publisher; his name, along with those of numerous other distinguished mathematicians, remains on the journal website.

Rumors of editor and journal misconduct have dominated the highly publicized case of the applied math journal Chaos, Solitons and Fractals (CSF), published by Elsevier. As reported in a 2008 article in Nature (Nature, vol. 456, 27 November 2008, page 432), "Five of the 36 papers in the December issue of Chaos, Solitons and Fractals alone were written by its editor-in-chief, Mohamed El Naschie. And the year to date has seen nearly 60 papers written by him appear in the journal." In fact, of the 400 papers by El Naschie indexed in Web of Science, 307 were published in CSF while he was editor-in-chief. This extremely high rate of self-publication by the editor-in-chief led to charges that normal standards of peer-review were not upheld at CSF; it has also had a large effect on the journal's impact factor. (Thomson Reuters calculates the impact factor of a journal in a given year as C/A, where A is the number of articles published in the journal in the preceding two years,

SIAM Review是工业与应用数学学会最重要的期刊，这个学会是国际上最大的应用数学团体,成立于1951年; 拥有一万多名会员，总部设在美国费城.

House）出版的《非线性科学与数值仿真国际杂志》（《International Journal of Nonlinear Science and Numerical Simulation》，以下简称《非线性》杂志）。该杂志在过去的三年里一直是“应用数学”类影响因子最高的杂志。该杂志与前面提到的《混沌》杂志有着千丝万缕的联系。比如说，该杂志的创办人及主编J.-H. He同时也是《混沌》杂志的编委，而《混沌》杂志的主编El Naschie也是《非线性》杂志的两个执行主编之一。这两位作者都在自己以及对方的杂志上发表了大量的论文，并且经常互相引用。

《非线性》杂志之所以有这么高的影响因子，还有另外一个原因。比如Journal of Physics: Conference Series (JPCS) 是由物理学学会（IOP）出版的会议论文集。会议主办方需要向出版社支付出版费才可以出版其论文集，而出版社宣称他们要求会议主办方在JPCS这本期刊上刊登的所有论文都要通过专家评审程序。然而，不论是JPCS这本期刊上最后的会议论文集，还是其互联网主页，都没有列出编委会名单，甚至没有列出如何判断一个学术会议质量的基本标准。尽管如此，Thomson Reuters在计算影响因子的时候，仍然会将JPCS的引用计入有效次数。2008年，JPCS一共出版了49卷，其中有一卷是收录由《非线性》杂志的主编J.-H. He在他所工作的上海东华大学举办的一个学术会议的会议论文集。这一期会议论文集收录的221篇论文里，有366篇参考文献是在《非线性》杂志上发表的论文，并且有353篇参考文献是J. -H. He本人的论文。这么做的结果是，即使刊登在《非线性》杂志上的论文在2008年一次都没有被其它任何论文引用过，“工业与应用数学学会”

and C is the number of citations to those articles from articles indexed in the Thomson Reuters database and published in the given year.) El Naschie's papers in CSF make citations, about 2000 of which are to papers published in CSF, largely his own. In 2007, of the 65 journals in the Thomson Reuters category "Mathematics, Interdisciplinary Applications", CSF was ranked number 2.

Another journal whose high impact factor raises eyebrows is the International Journal of Nonlinear Science and Numerical Simulation (IJNSNS), founded in 2000 and published by Freund Publishing House. For the past three years, IJNSNS has had the highest impact factor in the category "Mathematics, Applied". There are a variety of connections between IJNSNS and CSF. For example, Ji-Huan He, the founder and editor-in-chief of IJNSNS, is an editor of CSF, and El Naschie is one of the two co-editors of IJNSNS; both publish copiously, not only in their own journals but also in each other's, and they cite each other frequently.

Let me describe another element that contributes to IJNSNS's high impact factor. The Institute of Physics (IOP) publishes Journal of Physics: Conference Series (JPCS). Conference organizers pay to have proceedings of their conferences published in JPCS, and, in the words of IOP, "JPCS asks Conference Organisers to handle the peer review of all papers." Neither the brochure nor the website for JPCS lists an editorial board, nor does either describe any process for judging the quality of the conferences. Nonetheless, Thomson Reuters counts citations from JPCS in calculating impact factors. One of the 49 volumes of JPCS in 2008 was the proceedings of a conference organized by IJNSNS editor-in-chief He at his home campus, Shanghai Donghua University. This one volume contained 221 papers, with 366 references to papers in IJNSNS and 353 references to He. To give you an idea of the effect of this, had IJNSNS not received a single citation in 2008 beyond the ones in this conference proceedings, it would still have been assigned a larger