## 1086-00-342 **Greg Kuperberg\*** (greg@math.ucdavis.edu). My proposal for a zero-fee replacement for traditional mathematical journals.

Research publication in physics and mathematics is in a stable but strange holding pattern. On the one hand, an increasing fraction of all research papers are posted to the arXiv. On the other hand, most papers are separately submitted to traditional journals, even if they are in the arXiv. Many journals are owned by controversial publishers; moreover, I think that the entire journal system is ripe for reform. Nonetheless the journal system is oddly stable, despite the upheavals of the Internet.

Most reform attempts are new journals with either budget subscriptions, or page charges for authors. I conjecture that these strategies can't work. Instead, I propose a zero-fee peer review system in which (a) authors still get the publication credit that they need, but (b) the main labor costs are avoided entirely or (hopefully) greatly reduced. If the system is credible, then it might be sustainable with grants and volunteer service. Actually, I proposed this model about 10 years ago, but I never tried to implement it. I will give an updated discussion. (Received August 22, 2012)