New Section: Folk Theorems

The ICCM Notices would like to solicit articles on so-called *folk theorems*. These include results or proofs which are 'well-known' (to a certain community) but have never been written down in detail. Such results are typically passed by word-of-mouth, and may remain unknown to researchers who do not belong to a certain community. While understandable, the existence of folk theorems can be a barrier to participation of current and future mathematicians, and also indicates gaps in the published research record. We hope that this column can help to address these issues.

Readers who are not familiar with the concept of a 'folk theorem' (and even those who are!) may benefit from reading the oft-cited paper [2]. Some interesting examples of what can happen when a folk theorem is studied in detail can be found in [1, 3].

We will consider papers with a broad range of detail, from a short note describing the folk theorem and giving references which establish its use or prove special cases, to a full-length paper which gives a precise formulation and careful proof of the folk theorem, and may also include historical remarks. As an extension of the basic idea, and for identical reasons, we will also consider papers dedicated to collecting in one place a proof which is currently scattered throughout the literature. Finally, we welcome suggestions by readers of results they would like to see addressed in this column.

References

[1] Ethan Akin and Jeffrey D. Carlson, *Conceptions of topological transitivity*, Topology and its Applications **159** (2012), no. 12, 2815–2830, doi: https://doi.org/10.1016/j.topol.2012.04.016, URL https://www.sciencedirect.com/science/article/pii/S0166864112001927. MR2942654

[2] D. Harel, *On folk theorems*, Communications of the ACM **23** (1980), no. 701, 379–389, doi: https://doi.org/10.1145/358886.358892.

[3] J.-L. Lassez, V.L. Nguyen, and E.A. Sonenberg, *Fixed point theorems and semantics: a folk tale*, Information Processing Letters **14** (1982), no. 3, 112–116, doi: https://doi.org/10.1016/0020-0190(82)90065-5, URL https://www.sciencedirect.com/science/article/pii/0020019082900655.