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Stephen Gustafson* (gustaf@math.ubc.ca), Mathematics Department, University of British Columbia, 1984 Mathematics Rd., Vancouver, BC V6T 1Z2, Canada, and **Kyungkeun Kang** and **Tai-Peng Tsai**. *Schrödinger maps near harmonic maps*.

The Schrödinger map equation is a basic model in ferromagnetism, as well as a geometric (and hence nonlinear) version of the linear Schrödinger equation. An important open question is whether finite energy solutions are globally smooth, or blow up in finite time. We describe some results for equivariant Shroedinger maps from 2+1-dimensional space-time into the 2-sphere, with energy close to the energy of harmonic maps. (Received September 20, 2005)