1099-53-40     **Robet B. Kusner\*** (`profkusner@gmail.com`), Mathematics & G.A.N.G. (Center for Geometry, Analysis, Numerics & Graphics), University of Massachusetts, Amherst, MA 01003. *Chirality for knots and fields.* Preliminary report.

How might one measure the chirality of a space curve? Elementary physics offers some guidance. Imagine the curve as a thin wire drifting in a rarified fluid. The resulting torque on the wire leads to a trace-free matrix whose eigenvalues detect the chirality for the curve along the eigendirections. Analogous matrix chirality measures for vector fields are also considered. [Part of continuing collaborations with G. Dietler, W. B. Kusner, H. K. Moffatt, E. Rawdon, P. Szymczak....] (Received January 11, 2014)