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**Rafal Komendarczyk\*** ([rako@math.upenn.edu](mailto:rako@math.upenn.edu)), Department of Mathematics, 209 S. 33rd St., Philadelphia, PA 19104. *K-contact structures and energy minimization.*

In the realm of closed 3-manifolds the classical examples of steady Euler fluid flows minimizing the  $L^2$ -energy are ABC-fields on the flat 3-torus and the Hopf fields on the round 3-sphere. In this talk I will provide a condition for the curl eigenfield defined by a K-contact structure to be a minimizer. This result has been reported in the joint paper with Robert Ghrist in *Nonlinearity*. (Received February 15, 2007)