1030-76-214   **Roman Shvydkoy*** (`shvydkoy@math.uic.edu`), 431 Wisconsin Avenue, unit 3, Oak Park, IL 60302. *On the energy balance relation for incompressible fluids.* Preliminary report.

We will discuss new geometric conditions that imply vanishing of the energy flux of a divergence-free vector field. As a consequence we obtain new criteria for energy balance of viscous and conservation of energy of ideal incompressible fluids. (Received August 03, 2007)