1003-34-704 **Maria-Clara Nucci*** (`nucci@unipg.it`), Dipartimento di Matematica e Informatica, Universita' di Perugia, 06123 Perugia, Italy. *Jacobi last multiplier and Lie symmetries: a novel application of an old relationship.*

After giving a brief account of Jacobi last multiplier for ordinary differential equations and its relationship with Lie symmetries, we show how to use the last Jacobi multiplier in order to find Lie symmetries, and thus solve differential equations. Several examples are given. (Received September 28, 2004)