

Contribution Title:	LANDAU DAMPING
Authors:	C. Villani
Presenting author:	Villani C.
Affiliation:	Ecole Normale Supérieure de Lyon
E-mail:	cvillani@umpa.ens-lyon.fr
Invited speaker:	Topical session
YRS seminar:	NO

The celebrated and mysterious Landau damping predicts relaxation of the kinetic distribution of a classical collisionless plasma, without any diffusion or irreversibility. For the past sixty years, Landau damping has been treated exclusively for the linearized model, with the exception of very partial results. In a joint work with Clement Mouhot, we close this gap by presenting a solution to the nonlinear damping problem. Unexpected mathematical and physical developments will be discussed.