

INDAM MEETING:
**HYPERBOLIC DYNAMICAL SYSTEMS
IN THE SCIENCES**

CORINALDO (ITALY)
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Kinetic transport in the periodic Lorentz gas

The periodic Lorentz gas is one of the oldest models to study chaotic transport phenomena. In this talk I will discuss some recent results of joint work with A. Strombergsson (Uppsala), where we establish the existence of a random flight process in the Boltzmann-Grad limit (the limit of small scatterer size), and discuss the associated kinetic transport equations.