



Division for Engineering Sciences,
Physics and Mathematics

3rd Workshop on Kinetic Theory and Applications
Karlstad University, Sweden, 15 – 17 June 2003

Programme

June 15 Sunday

14.00 – 14.45 LUNCH in house 12

Afternoon session

Chairwoman: A.Nouri

14.45 – 15.20 *Optimal transportation and some classical inequalities,*
L.Caffarelli (Austin,Texas)

15.20 – 15.55 *Ergodic properties of Hénon maps and related dynamical systems,*
M. Benedicks (Stockholm)

16.05 – 16.40 *On Sobolev type inequalities,* V.Kolyada (Madrid)

18.00 – 22.00 BOAT EXCURSION on Vänern

June 16 Monday

Morning session

Chairman: L.Caffarelli

- 09.30 – 10.05 *Analytic number theory in Schroedinger type equations with the periodic initial data*, K.Oskolkov (Columbia, SC)
- 10.05 – 10.40 *Lattice points on circles and the discrete velocity model for the Boltzmann equation*, P.Kurlberg (Göteborg)
- 10.40 – 11.00 Coffee break
- 11.00 – 11.35 *Effective equations in random media*, F. Poupaud (Nice)
- 11.45 – 12.20 *Stochastic particle system approximating Navier-Stokes like equation*, A. Palczewski (Warsaw)
- 12.30 – 14.00 LUNCH in house 12

Afternoon session

Chairman: F. Poupaud

- 14.00 – 14.35 *A stationary kinetic two-rolls system of Boltzmann type and related problems*, L.Arkeryd (Göteborg)
- 14.35 – 15.10 *Asymptotic properties of the inelastic Kac model*, G.Toscani (Pavia)
- 15.10 – 15.30 Coffee break
- 15.30 – 16.05 *Kinetic theory with non-conservative interactions*, G.Spiga (Parma)
- 16.05 – 16.40 *Variable grid methods for kinetic equations*, G.Russo (Catania)
- 19.00 – 23.00 CONFERENCE DINNER at Kungsgatan 6

June 17 Tuesday

Morning session

Chairman: B. Wennberg

- 09.30 – 10.05 *Fluid-dynamic system for a mixture of a vapor and a noncondensable gas,*
K.Aoki (Kyoto)
- 10.05 – 10.40 *The transverse (Magnus force) on a rotating sphere in a rarefied gas,*
L.Söderholm (Stockholm)
- 10.40 – 11.00 Coffee break
- 11.00 – 11.35 *Willmore geometric flows. A kinetic approach,* A.Heintz (Göteborg)
- 11.45 – 12.20 *On solutions to the linear Boltzmann equation for granular gases,*
R.Pettersson (Göteborg)
- 12.30 – 13.30 LUNCH in house 12

Afternoon session

Chairman: K.Aoki

- 13.30 – 14.05 *On a quantum kinetic equation linked to the Compton effect,*
A.Nouri (Marseille)
- 14.05 – 14.40 *The Nordstrom-Vlasov system,* S.Calogero (Potsdam)
- 14.50 – 15.25 *Deriving the Boltzmann equation from a lattice gas,* B.Wennberg (Göteborg)