



Division for Engineering Sciences,
Physics and Mathematics

Workshop "Kinetic Theory and Applications"
Karlstad University, Sweden, 2 – 4 September 2001

Programme

September 2 Sunday

Chairman: C.Bardos

- 14.30 – 15.10 Self-similar solutions to the Boltzmann equation, A.Bobylev (Karlstad)
15.20 – 16.00 Spectral methods for collisional kinetic models and numerical singular limits,
G.Toscani (Pavia)
16.10 – 16.50 Generalized quasi-classical Boltzmann equation for a reacting gas, G.Spiga (Parma)
17.00 – 17.40 Symmetry and conservation laws for difference equations, V.Dorodnitsyn (Moskow)

September 3 Monday

Morning session

Chairman: G.Toscani

- 09.20 – 10.00 Boundary value problems for Boltzmann equation, L.Arkerud (Göteborg)
10.10 – 10.50 A case of nonuniqueness for nonlinear stationary Boltzmann equation,
A.Nouri (Marseille)
11.00 – 11.40 Kinetic theory and hydrodynamics 1, C.Bardos (Paris)
11.50 – 12.30 Kinetic theory and hydrodynamics 2, F.Golse (Paris)

Afternoon session

Chairman: K.Aoki

- 14.00 – 14.40 A vacuum pump without a moving part and its performance, Y.Sone (Kyoto)
14.50 – 15.30 Dynamics of non-spherical bodies small compared to the mean free path in an
inhomogeneous gas, L.Söderholm (Stockholm)
15.40 – 16.20 H-theorem and apriori estimates for the stationary Enskog equation,
A.Heintz (Göteborg)

September 4 Tuesday

Chairman: Y.Sone

- 09.20 – 10.00 New results in the theory of spatially homogeneous Boltzmann equation,
B.Wennberg (Göteborg)
10.10 – 10.50 Weak solutions to a quantum Boltzmann equation for Bose-Einstein particles,
X.Lu (Beijing)
11.00 – 11.40 Einstein-Vlasov equations, H.Andreasson (Göteborg)
11.50 – 12.30 Dynamics of homogeneous locally rotationally symmetric solutions of the
Einstein-Vlasov equations, C.Uggla (Karlstad)