

M13.0C Aperiodic and Incommensurate Structures II

Chair: T. Janssen

Co-Chair: G. Chapuis

Attendance: 63



This second minisymposium on aperiodic and incommensurate structures was more directed towards symmetry and theory. The first speaker, Mike Widom, gave an excellent overview of random tiling theory. He also treated diffuse scattering from phason fluctuations, in a hydrodynamic approach. Ron Lifshitz explained his theory of colour symmetry of aperiodic structures. Not only the scientific content, but also the technical computerized presentation was impressive. Experiment was represented by Marc de Boissieu. He showed a very interesting reversible phase transition from a quasiperiodic to a periodic structure with tetrahedral symmetry. Dieter Joseph showed how one may generalize the symmetry concept to include also rather general point sets, such as model and Meyer sets. Finally, the most mathematical contribution came from Jean-Louis Verger-Gaugry. He showed to be able to calculate the intensity of systems even in the case of a singular continuous spectrum, and the power laws with which the intensity scales as a function of sample size. Really a remarkable achievement. The five talks gave a nice overview of the hot topics in the field, and were all presented in a very clear way. The session was very well attended by approximately 200 people.

T. Janssen