Current Problems in Extragalactic Dust



Monday 29 June 2009 - Friday 3 July 2009 Niels Bohr Institute

Scientific Programme

Many practical problems in cosmic dust currently beg for a resolution.

Example questions to be addressed: Are there very different dusts in remote galaxies than we observe in the local group? Is the Cardelli law an adequate parameterisation of dust outside the local group? What is the best extinction curve for SNIa observations? What is the scatter? Is a single law even a sensible approach? What is the dust dependence on metallicity and UV radiation? How quickly can dust form—i.e. are there dusty galaxies in the dark ages and what creates it? How does dust affect the formation of Pop II and III stars?

Is there a transition in the major dust producers?

What is the origin of the 2175 Å bump-do we have strong observational indicators?

The programme is constructed to focus in five topics for five days.