

## **R61c            Modelling "The Antennae"(NGC 4038/39)**

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Detailed observations of the Antennae galaxies in recent years provide a remarkably complete picture of the behaviour of interstellar material and star formation in the early stage of a galactic merger. Perhaps peculiar in shape, interacting galaxies are now thought to be common in the early ages of the universe and such merging is in fact one of the major driving forces of galaxy evolution. My intention is to build computer models employing GRAPE to calculate the gravitational dynamics, while all other physical aspects are covered by the CD-SPH code described above. Observed morphology, kinematics, and more recently obtained chemical abundances and distribution of the galactic pair are used to constrain model parameters describing the interaction. The resulting modelled dynamical and chemical properties will then be compared to the real system.