



Soaring Achievements

How does an aircraft without an engine stay up in the air? What factors affect a glider's performance and how far it can travel? Scientific experiments with gliders have been carried out since the 1930's, particularly with relation to design. Mathematical modelling is used to make and refine gliders that perform as well as possible. The 8 video tracks on this album describe some of the highly mathematical concepts used by pilots, such as glide angle, the 'best speed to fly', and the intricacies of competition flying. The principles of gliding are described with the help of 3D graphics and archive film. This material makes up part of the course MST209, Mathematical methods and models.