## Comets and asteroids with FIRST

D. Bockelée-Morvan Observatoire de Paris, 5 place Jules Janssen, F-92195 Meudon, France Dominique.Bockelee@obspm.fr

The promise of FIRST for the study of comets and asteroids will be reviewed. This review will be focussed on: i) observations of water submillimeter lines in comets to measure water outgassing from the nucleus, to study water excitation in the cometary atmosphere and its kinematics, and to measure the ortho-to-para ratio; ii) the major outcome expected concerning solar nebula models and cometary formation with the measure of the D/H ratio in  $H_2O$  in a large sample of comets, including short-period comets; iii) the study of surface properties of asteroids.