

Poster at Splinter Meeting

Splinter B

## OH MASER SURVEYS WITH THE SKA

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The strong line emission of OH masers traces regions where new stars are born as well as evolved stars undergoing substantial mass loss. From SKA deep surveys at 18 cm, where the maser lines from the ground-state of the OH molecule arise, we predict the discovery of several ten thousand sources of stellar and interstellar origin throughout the Galaxy. This prediction is based in part on a new database comprising all known galactic stellar OH masers. In addition, larger numbers of OH masers will be detected for the first time in Local Group galaxies. The study of this maser emission has many applications, including the studies of stellar magnetic fields and kinematics, of shocked gas in the interstellar medium and of stellar populations grown in environments of different metallicity.