



SFB 956 colloquium on December 17, 2012

Presenter| Christian Glück

Presentation title| Dark Molecular Gas and the formation of Molecular Clouds in the Milky Way
and the Nearby Galaxy M33

Mini-abstract

The formation of molecular clouds and the nature of “dark molecular gas” in our Galaxy and in extragalactic sources is not well understood.

To investigate these phenomena in the Milky Way we carried out large-scale CO 1-0 observations with the Mopra 22-m telescope and [CI] maps with the Nanten-2 telescope. We combine these datasets and compare them to complementary PARKES HI data.

A similar but extragalactic study is performed within the HERM33ES project for the nearby galaxy M33. The combination of HERSCHEL observations with ground based single-dish and interferometric data provides a unique catalog of the most important gas tracers and cooling lines in M33. I will present [CII], [CI], CO 2-1 and HI observations in selected regions along the galactic radius.