

A11a **Studies of the Violent Starbursts in Biased Environments**

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The evolution of extreme star formation in galaxies associated with cluster-sized dark matter halos has been, until now, relatively unexplored. Optical studies are clear in showing that cluster members in the local universe have low star formation rates. On the other hand, a series of studies of the submillimeter galaxy population (SMGs) in the vicinity of high-redshift ( $z \gtrsim 4$ ) quasars and energetic radio galaxies show dramatically enhanced star formation rates in these environments. What happens in between these two epochs? When are the massive ellipticals found in local clusters formed?

With the 1.1mm AzTEC instrument on the ASTE telescope, we have completed one-half of the first comprehensive survey of the SMG population in biased environments. During the 2007 season we imaged 18 clusters and proto-clusters to depths of 0.7-0.9mJy and over a spatial scale sufficient to probe both the cluster cores and the galaxy infall region around each cluster. We will report on the survey design, our plans for acquiring follow-up observations, and show some preliminary results from the first half of the survey.