MOLECULAR SPECTROSCOPY AND THE ATACAMA LARGE MILLIMETER/SUBMILLIMETER ARRAY (ALMA)

ANTHONY J. REMIJAN, *NORTH AMERICAN ALMA SCIENCE CENTER (NAASC), National Radio Astronomy Observatory, 520 Edgemont Road, Charlottesville, VA 22903*.

The next generation of powerful millimeter/submillimeter (e.g. ALMA, LMT & Herschel) and radio (GBT, NRAO's our most oversubscribed telescope, & eVLA) observatories require extensive resources to help identify and analyse spectral line transitions. The Atacama Large Millimeter/submillimeter Array (ALMA), an international astronomy facility, is a partnership of East Asia, Europe and North America in cooperation with the Republic of Chile. The North American ALMA Science Center (NAASC) in Charlottesville, Virginia, is responsible for supporting the science use of ALMA by the North American astronomical community (the USA via the NRAO and Canada via the National Research Council of Canada) and for research and development activities in support of future upgrades of ALMA. In this presentation, I will first present the current state of the ALMA project and the NAASC and second, the steps taken by the NA ALMA partners to address the spectroscopic needs of the observatory including project "Splatalogue". Finally, I will discuss the additional plans of the NAASC to provide tools for the analysis of spectroscopic products of the observatory, such as spectral line data cubes.