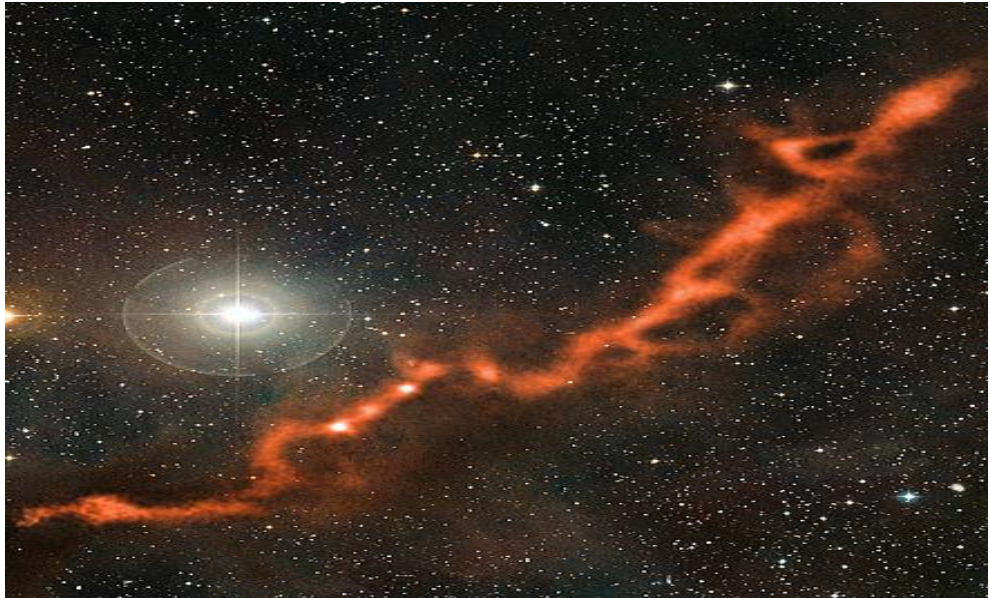




PHYSICS COLLOQUIUM



**Dr. Kendall Hall
CSU Chico**

The Role of Hydroxyl in Giant Molecular Cloud Formation

Abstract

Stars and planetary systems form in the densest parts of giant molecular clouds, but how do such clouds come into existence? Due to Hydrogen's abundance, molecular hydrogen (two hydrogen atoms covalently bonded together) is the most abundant molecule in the universe by a factor of 10^5 . This molecule defines cloud boundaries and makes up the bulk of the interstellar medium but emits light in only the most particular of circumstances. My research aims to help refine methods of finding and quantifying this "invisible" molecule through the observation of other molecules. The formation of hydroxyl is intimately related to that of molecular hydrogen. In this talk I will explore the use of hydroxyl as a tracer for molecular hydrogen.

**3:00 p.m. - 4:30 pm, Friday, November 18th,
In-Person: McLane 162**