You are welcome to nominate speakers to colloquium@nao.cas.cn. The video and slides of previous colloquia and more information can be found at http://colloquium.bao.ac.cn/.

# 国台学术报告 NAOC COLLOQUIUM

## 2016 年 第 35 次 / No. 35 2016

**Time: Wednesday 2:30 PM, Nov. 9** **Location: A601 NAOC**

# Do Stars form by Gravitational Collapse?

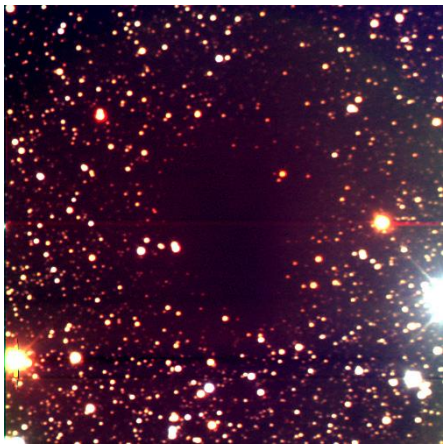

## Prof. Neal Evans

**Department of Astronomy, The University of Texas at Austin, USA**


Prof. Neal Evans earned his bachelor's degree and doctorate in physics, at the University of California, Berkeley and did a year and a half of post-doctoral work at Caltech before coming to Texas. Although initially interested in high-energy and particle physics, he shifted his focus to astrophysics and worked with a research group started at Berkeley by Nobel laureate Charles Townes. Evans joined The University of Texas faculty in 1975, where he taught for 40 years, including classes about the search for extraterrestrial life, and a seminar on the origin of the Universe and life. He was the Randall Centennial Professor of Astronomy before becoming an Emeritus Professor in Sept. 2016. Evans has led large groups in programs on both the Spitzer and Herschel space telescopes, studying the formation of stars and planet-forming disks. He is a member of the ALMA Board.


## Abstract

We have long assumed that stars form by gravitational collapse but hard evidence of infalling motions has been elusive. The Bok Globule, B335, has been the test bed for studies of simple isolated star formation. Our ALMA Cycle 1 observations of this source have revealed definitive kinematic evidence for infall in the form of redshifted absorption against the continuum source. Approximately spherical infall appears to extend inward to about 16 AU. Further studies of this and other sources will allow us to study the velocity fields of infalling matter and the transition to a rotationally supported disk, possibly through the formation of a magnetically supported pseudo-disk.

*All are welcome! Tea, coffee, biscuits will be served at 2:15 PM.*