Conference: Lecture
Location: Onsala Space Observatory
Dates: September 27, 2012

Title: "Eta Carinae: a Demanding Mistress"

Presenter: Theodore Gull

Abstract:

In the 1840's a southern star, Eta Argus, brightened to rival Sirius for nearly a decade, then faded. Today, we see the Homunculus, an hourglass figure with tutu, a dusty shell exceeding 12 solar masses expanding outward at 500 km/s. Many observers have systematically studied the massive binary total shrouded by interacting winds and its ejecta. More recently 3-D wind-wind collision models have begun to explain the extended structures resolved by Hubble Space Telescope. Now Herschel Space Observatory infrared scans are revealing wind interaction emissions and complex molecules left over from the dust that formed out of gas originally overabundant in nitrogen and greatly-depleted in oxygen and carbon.

Many questions remain to be answered:

What is the dust that formed in the 1840s event?
What are the end states of the two massive companions... SN, GRB, Hypernova?
and When?