Instituto de Astronomía
Universidad Nacional Autónoma de México
Sede Ensenada, Baja California, México

Seminario de Investigación

Miércoles, 27 de Junio de 2012
11:00 hrs, Auditorio IA-Ensenada

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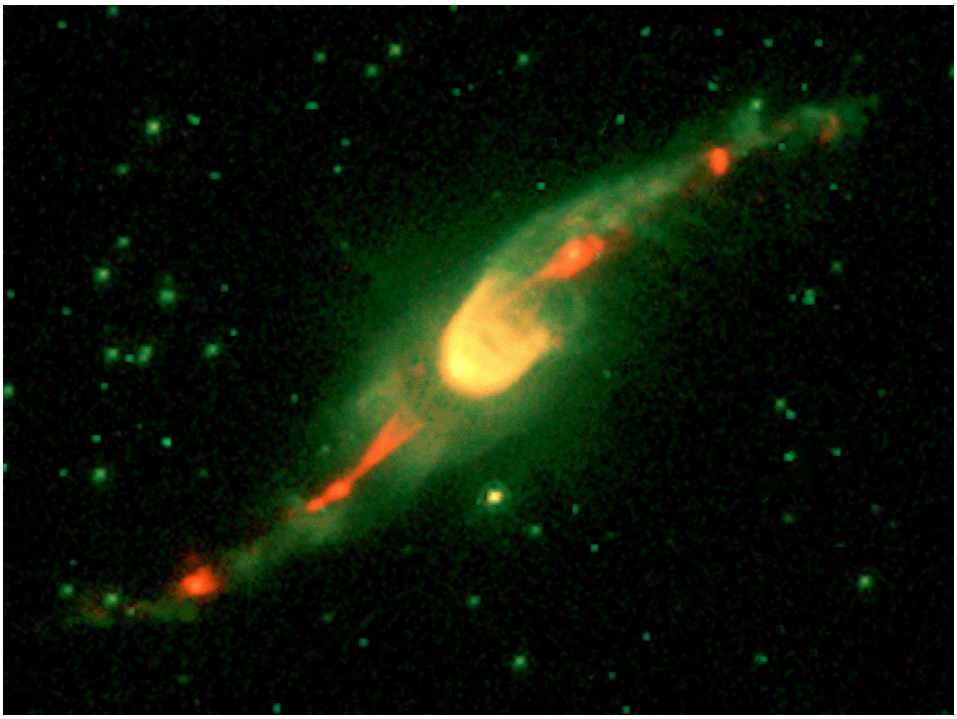
"CLASIFICACION MORFOLOGICA DE ESTRELLAS POST-AGB."



We present a complete study of the morphology of post-Asymptotic Giant Branch (post-AGB) stars. The post-AGB stage is a very short evolutionary phase between the end of the AGB and the beginning of the Planetary Nebula (PN) stage (between 100 and 10,000 yrs). Post-AGB stars do not show variability and are not hot enough to fully ionize the hydrogen envelope. We have defined the end of the post-AGB phase and the beginning of the PN phase when the star has a temperature of 30000 K. Post-AGB stars have a circumstellar shell that is illuminated by the central stars or partially ionized. However, this circumstellar shell is too small to be resolved by ground-based observations. Thus, we have used the Hubble Space Telescope (HST) database to resolve these shells. 117 post-AGBs were found in this database. Here we present the preliminary results on their morphological classification and the correlation with the galactic latitude. Our preliminary results show that 38 % of the sample are stellar-like (S), 31 % bipolar (B), 12 % multipolar (M) and 19 % elliptical (E).