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**NAME:** Gerardo Ramos-Larios

**AFFILIATION:** University of Guadalajara

**CONTRIBUTION:** Poster

**TITLE:** Discovery of hidden clumps of molecular hydrogen in the Owl nebula

**AUTHORS:** G. Ramos-Larios, M.A. Guerrero, J. Toalá, S. Akras

**AFFILIATIONS:** University of Guadalajara, Instituto de Astrofísica de Andalucía, Instituto de Radioastronomía y Astrofísica, National Observatory of Athens

**ABSTRACT:**

GEMINI GMOS optical images and CFHT WIRCAM infrared (IR) data of NGC 3587 (The Owl nebula) have developed the precise location of elusive and discrete molecular material reservoirs into this object. The material is also observed on Spitzer IRAC mid-IR images, confirming their molecular nature. In this work, we present high-resolution imagery and the IR analysis of the newly found features in the H<sub>2</sub> emission line. Our results indicate that the present nebular structures are reminiscent of condensations that have been shielded by dust and could be sculpted by means of instabilities in the main nebula.