Title: The central gas consumption timescale in spirals

Authors: Jogee, S.; Kenney, J. D. P.

Affiliation: AA(Yale University Astronomy Department, jogee@astro.yale.edu), AB(Yale University Astronomy Department, kenney@astro.yale.edu)

Journal: The central regions of the Galaxy and galaxies, Proceedings of the 184th symposium of the International Astronomical Union, held in Kyoto, Japan, August 18-22, 1997. Edited by Yoshiaki Sofue. Publisher: Dordrecht: Kluwer, 1998. ISBN: 079235060X, p.223

Publication Date: 00/1998

Origin: AUTHOR

Bibliographic Code: 1998IAUS..184..223J

Abstract

BVR, Hα and [O III] observations of NGC 2782, a peculiar galaxy with 2 long tidal tails, a relatively undisturbed optical disk and a central starburst. NGC 2782 harbors 2.7 times 10^9 M_o of (H_2+He), in a bar-like, double-lobed distribution within a radius of 10’ ’ (1.5 kpc). The gas has mostly circular motions similar to the HI and ionised gas cores, but shows reverse kinematics w.r.t the outer HI tails. Weak bar-like streaming motions are detected near the CO lobes. The CO properties are consistent with the presence of a nuclear CO bar. JHK images reveal a nuclear stellar bar and a possible weak primary bar. The 2 straight dust lanes in the B-V images, are offset towards the leading edge of the primary bar and bracket the nuclear bars. The CO bar leads the nuclear stellar bar and trails the primary bar, suggesting the nuclear bars might be dynamically decoupled from the primary bar. The optical and RC images reveal a central starburst and a starburst-driven outflow with an unusual morphology. The outflowing Hα has a bubble morphology with a closed shell at its outer edge at ~850 pc S of the nucleus. The Hα bubble has a similar extent as the southern of a pair of diffuse RC bubbles, and the Hα shell coincides with a similar RC shell. The outflow in NGC 2782 may be in a younger dynamical phase than the freely expanding outflow in galaxies like M82.

- [x] Title
- [x] Abstract Text

Return: (•) Query Results   Return 100 items starting with number 1
( ) Query Form

Database: [x] Astronomy/Planetary
[ ] Instrumentation
[ ] Physics/Geophysics
[ ] ArXiv Preprints

Send Query   Reset

NASA ADS Homepage | ADS Sitemap | Query Form | Preferences | HELP | FAQ