Gull: There are certainly no larger outer shells as far as photographic studies are concerned.

DYNAMICAL EFFECTS OF RADIATION PRESSURE IN EVOLVED PLANETARY NEBULAE

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We have investigated the dynamical effects of radiation pressure occurring in evolved planetary nebulae, for a wide range of central star and nebula parameters. Detailed model atmosphere calculations of the incident stellar flux were used to determine the temperature, ionization structure, and radiative acceleration throughout the nebula. Our computations included the effects of dust, a provision for charge exchange reactions, and all bound-bound, bound-free, and free-free processes that contribute significantly to the total radiation pressure. We have estimated the effects of the radiative force on nebular condensations and, as an example, have applied the results to the problem of the numerous radial filaments in NGC 7293. This work was supported by the U.S. ERDA under contract No. W-7405-Eng-48.

SOME PROPERTIES OF DUST IN PLANETARY NEBULAE

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From an analysis of infrared, optical, ultraviolet and radio data of a number of planetary nebulae, it is found that the dust mixed with the ionized gas mainly consists of relatively large, graphite-like grains.