## Abstract Submitted for the APR09 Meeting of The American Physical Society

## The Leviathan and the Whirlpool Nebula TREVOR WEEKES —

Nearly 240 years after Galileo made his first astronomical observations, the Third Earl of Rosse built what was to be the world's largest optical telescope for 75 years. The so-called Leviathan had an aperture of 1.8m and was built entirely by workers on his estate in Birr, Ireland. In April, 1845, shortly after the telescope was commissioned, Lord Rosse trained his telescope on fifty-first object in Messier catalog and saw for the first time its spiral structure. This discovery of what was later called the Whirlpool Nebula was to dramatically change contemporary thinking about the nature of nebulae and redirect emphasis of the Earl's observing program. The initial observations were immediately accepted although they were based on hand drawn representations by the noble amateur based on his unverified observations. Ironically this early discovery was to be the most outstanding achievement of the Leviathan.

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