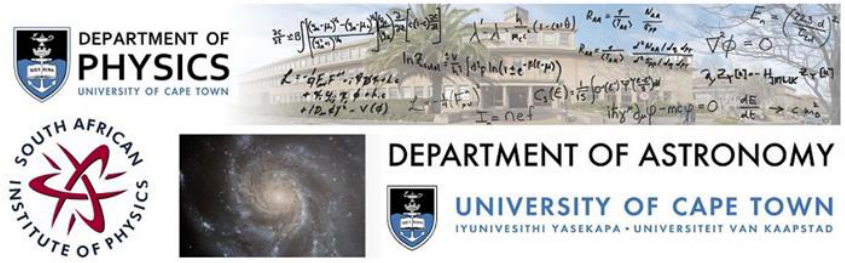

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Optical interference with digital holograms

Wednesday, 6 July 2016 11:30 (20 minutes)

Abstract content
   (Max 300 words)
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In 1804 Thomas Young reported the observation of fringes in the intensity of light, and attributed it to the concept of interference between coherent sources. We revisit this famous experiment and show how it can be easily demonstrated with digital holography. We look at the concept of interference in light and ask, fringes in what? We show that depending on how light interferes, fringe patterns in other observables besides intensity can be seen. We explain this conceptually and demonstrate how this can be observed experimentally. We provide a holistic approach to the topic, aided by modern laboratory practices for easy demonstration of the underlying physics.

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