Ring interferometers: A unified framework for the Sagnac and Fizeau effects.

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Abstract:

I shall describe a study of the geometric optics of ring interferometers undergoing adiabatic deformations. This puts the Sagnac and Fizeau effects under a single umbrella and explains why Sagnac is independent on the refraction index while Fizeau is not. The talk is based on joint works with A. Ori and O. Kenneth