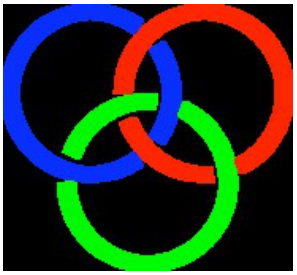

ID de Contribution: **37** Type: **Non spécifié**

# Resonances, Spectral Densities and Scattering Cross Sections

*lundi 10 octobre 2011 18:00 (40 minutes)*

In my talk will describe how resonance trajectories appear and how they are bounded on the complex energy plane. I will then introduce the mathematical spectral function and the spectral density. From there I will describe how the spectral density can be partitioned into contributions from uncovered resonances and the free particle spectral density. I will then turn to scattering cross section and discuss the influence of resonances on the cross section through a construction of a reduced partial wave S-matrix and a reduced partial wave cross section. This enables me to show that the Breit-Wigner formalism is not fully appropriate to describe a partial wave S-matrix and partial wave cross section.

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