

# Precession resonances in hierarchical triple systems

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A binary system can be resonantly excited by a distant perturber if its precession frequency is equal to the period of the faraway object. I will show how this can dramatically increase the eccentricity of the binary, pushing it to values observables in the LISA band. This phenomenon is new and distinct from the Kozai-Lidov mechanism since it operates in a corner of the parameter space where current studies assume that the state of the binary is unaffected by the perturber.

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