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## Precession resonances in triple systems

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Three-body systems are very common in the universe and it is likely that future gravitational-wave detectors will detect and measure the parameters of such systems. I will describe an interesting relativistic resonance taking place in hierarchical three-body systems when the precession frequency of an inner binary black hole matches the period of an outer perturber object. I will show how this resonance can dramatically increase the eccentricity of the binary, pushing it to values observable in the LISA band. This phenomenon is new and distinct from the Kozai-Lidov mechanism.

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