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Chaotic Scattering in the Post-Newtonian Three-Body Problem
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— A general solution for the three-body problem in Newtonian gravity does not exist, and the system is known to be chaotic. We consider the three-body problem in general relativity using the Post-Newtonian equations of motion that include the first gravitational-wave emission terms. Using a model problem of a binary that interacts with a third object, we present evidence that this system also has chaotic solutions.

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