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Tidal disruption events induced by the Kozai-Lidov mechanism

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We geometrically analyze the evolution of the Kozai-Lidov mechanism induced by an infalling tertiary. This approach enables us to clearly understand how the inner orbits are deformed, in response to the time variation of the related phase-space structure.

We predict that, in a stellar cluster associated with massive black hole binaries, a constituent star could abruptly become highly eccentric, because of a peculiar bifurcation pattern.

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