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Stellar oscillations induced by the passage of a fast stellar object M. NAIZER, C.A. BERTULANI, W. NEWTON, Texas A&M University - Commerce — The scattering event between a star and a massive object (such as a black hole or neutron star) results in bulk oscillations in the star. We consider near-miss collisions along a hyperbolic trajectory with impact parameters greater than a grazing collision. Such oscillations are studied and modeled using a simplified quadrupole oscillation model. Such oscillations will lead to a sudden and large luminosity variation of the star.

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