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**Emanuel Indrei\*** (eindreii@purdue.edu). *Dynamics of uniformly elliptic free boundary problems in higher dimensions.*

The tangential touch problem for uniformly elliptic fully nonlinear operators involves understanding the dynamics of how free boundaries generated by solutions of nonlinear PDEs associated to such operators intersect fixed boundaries. Recent progress has been made in showing that the intersection occurs non-transversally in two dimensions. We discuss partial results in higher dimensions as well as some applications. (Received February 03, 2017)