

FOCAL SURFACES OF WAVE FRONTS

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In this talk, we deal with focal surfaces of wave fronts in Euclidean 3-space \mathbf{R}^3 . In particular, we consider the case that wave fronts have non-degenerate singular points, which contain cuspidal edges and swallowtails. We give characterizations of singularities appearing on focal surfaces in terms of geometric properties of initial wave fronts. Moreover, we show geometric properties of focal surfaces of cuspidal edges.