On the Hessian topology of real algebraic surfaces

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In this talk we give some results about the Hessian topology of real algebraic surfaces which are the graph of some real polynomial function in two variables. In particular, an index formula for the field of asymptotic directions involving the number of connected components of the Hessian curve constituting the boundary of the unbounded connected component of the complement of the Hessian curve, and the number of the corresponding Gaussian cusps will be given.