ISTANBUL ANALYSIS SEMINARS

ON CHARACTERIZATION OF MINIMAL AND MAXIMAL SURFACES BY HARMONIC MAPPINGS

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Abstract: In this talk, we obtain distortion theorems for the Weierstrass-Enneper parameters and some estimates for the Gaussian curvature of minimal and maximal surfaces when the corresponding univalent harmonic mapping belongs to a certain subclass of S_H . We also generalize a well-known Weierstrass-Enneper-type theorem for minimal surfaces to maximal surfaces.

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