Min-max construction of anisotropic CMC surfaces

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Abstract
We prove the existence of nontrivial closed surfaces with constant anisotropic mean curvature with respect to elliptic integrands in closed smooth 3-dimensional Riemannian manifolds. The constructed min-max surfaces are smooth with at most one singular point. The constant anisotropic mean curvature can be fixed to be any real number. In particular, we partially solve a conjecture of Allard [Invent. Math.,1983] in dimension 3. Joint work with G. De Philippis.

Date: 28 April 2023 (Friday)
Time: 9:00am
Zoom Meeting: https://hkust.zoom.us/j/97493166138 (Passcode: 421146)

All are Welcome!