

HIGHER-DIMENSIONAL WILLMORE ENERGIES VIA MINIMAL SUBMANIFOLD ASYMPTOTICS

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This talk will describe a derivation of a conformally invariant energy for an even-dimensional submanifold of a Riemannian manifold generalizing the Willmore energy of a surface. The energy and its associated Euler-Lagrange equation both arise naturally upon considering the asymptotics of minimal submanifolds in asymptotically Poincaré-Einstein spaces associated to the background conformal manifold. Particular attention will be paid to the case of a submanifold of dimension 4.