

Differential geometry of folding and fracturing of crust

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When the Riemannian manifold of V_n dimension with non-zero Euler-Schouten curvature tensor exists in the enveloping manifold (Euclid space) of V_m dimension, the including Riemannian manifold of V_n protrudes into the enveloping manifold of V_m dimension. From the Euler-Schouten curvature tensor and force-balance equation, Kondo (1955) derived a unified theory on yielding or buckling of plates or shells. By using this concept of protrusion into high order spaces, we present a unified equation on yielding or buckling of crust.

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