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A proof of Douglas' theorem on the existence of disc like minimal surfaces spanning Jordan contours on R^n . (English) [Zbl 0635.53033](#)

Théorie des variétés minimales et applications, Sémin. Palaiseau/France 1983/1984, Astérisque 154-155, 39-50 (1988).

Summary: [For the entire collection see [Zbl 0635.53001](#).]

An historical account of the Plateau problem is given together with a complete proof by a direct and elementary method of the fact that any minimum of the Dirichlet functional is conformal.

MSC:

[53C42](#) Differential geometry of immersions (minimal, prescribed curvature, tight, etc.)

[53A10](#) Minimal surfaces in differential geometry, surfaces with prescribed mean curvature

[49Q05](#) Minimal surfaces and optimization

Keywords:

Douglas' theorem; Plateau problem; Dirichlet functional