



## Seminário de Geometria

17/04/2019

Quarta-feira às 10h30 no Auditório do MAT

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## Surfaces with prescribed mean curvature

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**Abstract** We will consider complete hypersurfaces in  $R^{n+1}$  whose mean curvature is given as a prescribed function of its Gauss map. This theory extends among others the usual one of constant mean curvature hypersurfaces in  $R^{n+1}$ , and also that of self-translating solitons of the mean curvature flow. We will study existence and geometric properties of compact examples, and also existence and classification of rotational hypersurfaces. For the particular case  $n = 2$ , we will obtain results regarding a priori height and curvature estimates, and classification of properly embedded surfaces with at most one end. (Joint work with A. Bueno and P. Mira)