Isolated singularities of elliptic linear Weingarten surfaces

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Abstract. In this talk we will focus on isolated singularities of elliptic linear Weingarten surfaces (i.e. a surfaces for which the mean and Gaussian curvature satisfy a relation as $aH + bK = 1$). We will do a local study by means of the classification of singular solutions of its associated Monge-Ampère equation. We will explain when and when not previous techniques concerning elliptic Monge-Ampère equations modeling convex surfaces apply to this more general case. This is a joint work with João Paulo dos Santos.