Geometrical Computer Vision from Chasles to Today

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Abstract. In this talk I will present geometrical computer vision from its early beginnings in projective geometry and photogrammetry to new research on methods in algebraic geometry. In the talk I will give examples of theory for minimal structure and motion problems (central and non-central cameras, 1D and 2D retina), critical configurations and geometry in general as well as practical results of using such theory in 3D reconstruction, navigation, modelling and image interpretation.

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