

### **SEMINAR**

#### on

## COMPLEX AND HYPERCOMPLEX ANALYSIS

Sala Sousa Pinto (2º piso), Departamento de Matemática

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# Curvature

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The curvature of segmented objects is a valuable criterion for image analysis and feature extraction. In the 1970, the bending energy was one of the crucial tools for object classification in biological and medical image processing. Nowadays, more stable methods via spline approximation or the approximation with maximal digital circular arcs are well known. In our talk, we give an overview of these methods and discuss their strengths and drawbacks. We present estimates for the order of curvature approximation with splines and an ImageJ software package for curvature detection based on splines.

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