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ESCOLA DE CIÊNCIAS E TECNOLOGIA
DEPARTAMENTO DE MATEMÁTICA

Centro de Investigação em Matemática e Aplicações
Departamento de Matemática
Programa de Doutoramento em Matemática

Seminário / Seminar

Date: 7.11.2024, Room: 155 CLAV, Time: 14h00

Zoom address: https://videoconf-colibri.zoom.us/j/5664652821?pwd=WXJBSWUxL25vR3hJUWRhWHpoWENSdz09

The Maxwell problem on electrostatic points

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Abstract: Given a configuration of n point charges, how many points are there where the electric field vanishes (electrostatic points), and where are they? In 1873 Maxwell conjectured that there are at most $(n-1)^2$ such points. This is a surprisingly difficult question that remains open to this day. I will summarize some known results and mention part of some current joint work with Herbert Edelsbrunner and Chris Fillmore, from IST Austria, exploring this conjecture.