Ciências ULisboa

GEOMETRY & PHYSICS
SEMINAR

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CMAFcIO

From electrostatics to geodesics in K3 surfaces

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Abstract:

Motivated by some conjectures originating in the Physics literature, I have recently been looking for closed geodesics in the K3 surfaces constructed by Lorenzo Foscolo. It turns out to be possible to locate several such with high precision and compute their index (their length is also approximately known). Interestingly, in my view, the construction of these geodesics is related to an open problem in electrostatics posed by Maxwell in 1873.

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