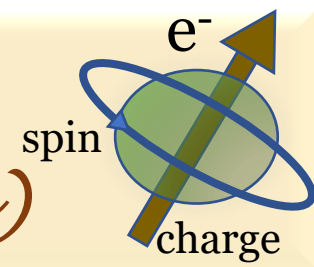




W2S Seminar

(Webinar series on Spintronics)



When plasmons meet magnetism: plasmon-assisted opto-thermal excitation of nanomagnetic arrays

Speaker:
Prof. Paolo Vavassori
CIC nanoGUNE BRTA and IKERBASQUE, Spain

Date and time:
**16.12.2021 at
3.00 pm IST
i.e. 10.30 am CET**

Abstract

Nanomagnetic logic, in which the solution of a complex computational problem is embedded into the energy hierarchy of a system of magnetostatically-coupled nanomagnets, offers an attractive approach to low-power in-memory computation. So far, however, nanomagnetic logic gates driven by thermal energy held the disadvantage of slow operation speeds and lack of spatial selectivity of currently-employed global heating methods required to enable the activation of the nanomagnets acting as computational bits. We show how this disadvantages can be removed by employing local plasmon-assisted photo-heating to implement fast (up to GHz), energy-efficient and optically reconfigurable platform for in-memory computation.

To attend the lecture please visit: **Passcode: xqTX7w** Zoom link:
<https://us06web.zoom.us/j/88146290199?pwd=MWp0dmlYNW1mSHpDYk9tc2x0amtkZz09>

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