The IQARO (SpIn-orbitronic QuAntum bits in Reconfigurable 2D-Oxides) project will host a series of monthly seminars to communicate the work being done as part of the project.

The seminars will feature presentations from IQARO partners from across all areas of the project, followed by a brief Q&A.

The first seminar will take place on **Friday, 13rd of September at 2:30 p.m. (CET)**

Bartlomiej Szafran AGH University of Science and Technology, Kraków (Poland)

Driven spin transitions in quantum dots at the interface between $SrTiO_3$ and $LaAlO_3$

Abstract:

The talk focuses on the results of the tight-binding modeling of single-and two-electron states in a quantum dot and a double quantum dot and on the simulations of the spin transitions driven by periodic electric field. The symmetry of the states in the context of harmonic and subharmonic transitions is discussed. The talk reports on the optimization of the driven singlet-triplet transitionsby the asymmetry of the double quantum dot. Rabi vs Landau-Zener transition regimes are discussed.

Zoom link:
https://us02web.zoom.us/j/82905916616?pwd=TNzc5tZa717ZcGAq2SaIjpL7Bx2EbT.1

meeting ID: 829 0591 6616
password: 243538

for more information about the project: www.iqaro.eu

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