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Type: **Poster Presentation**

Spin-dependent electronic properties of random layered semiconductor systems

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Abstract content **
 **(Max 300 words)

Abstract: The electronic properties of random superlattices and quantum wells of lattice-matched III-V semiconductors are investigated by employing the extended empirical pseudopotential method. The model includes the important spin-orbit coupling terms in the single electron Hamiltonian. The numerical calculations are, in this case, facilitated by a highly optimised python-Fortran code, following a large basis approach. The effect of the lack of periodicity in these systems, on their electronic properties, is simulated and one possible application of the simulation results is proposed.

Apply to be **
 considered for a student
 **award (Yes / No)?

Yes

Level for award **
 **(Hons, MSc, **
 **PhD)?

MSc

Would you like to **
 submit a short paper
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 Pro-**ceedings (Yes / No)?

Yes

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