

## Master or Engineer internship 2024-2025

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Research group : CARBON

Title : Study of resistive memories: State of the art - prospects/Outlets for neuromorphic computing - Impact of 2D materials (use of AI recommended)

### Abstract :

Resistive memories: operating principle, state of the art - advantages and disadvantages compared with other memory families.

Potential prospects: Use in neuromorphic computing as connections between neurons? How can this be justified?

New work is emerging on memories based on 2D materials (mainly TMDs -Transition Metal Dichalcogenides). Could you give us an overview of these new approaches?

PS: Can the use of AI tools currently available help you in your work? Please explain your approach.