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Scientific tags: Electronics, Devices, Exploratory nanofabrication, Neural networks, Materials science

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Our main theme is to develop simulation schemes for electron transport under quantum confinement. Currently, we consider quantum cascade lasers, nanowire devices, and exciton kinetics. Particular emphasis is given to the quantitative comparison with ongoing experiments at NanoLund and further groups abroad. In a typical master thesis, the student applies existing simulation packages to identity the physical origin in experimental data and/or further refines the theoretical approach.