



**Vincent PELGRIN**

From Finland to France



Project: **Hybrid silicon photonics for solving bottlenecks in Kerr frequency comb generation**

Research topic: **Physics**

Finnish Institution: **Aalto University**

French Institution: **Université Grenoble Alpes, Grenoble INP**

Dates of mobility: **20/06/2022 to 07/01/2022**

Program: **Maupertuis Programme**



## PRESENTATION

[Vincent Pelgrin](#) graduated from [Rennes 1 University](#) with a Master degree in fundamental Physics and application in 2019. During his Master thesis, he studied the generation of frequency combs in micro ring resonators at [Centre for nanoscience and nanotechnology](#) (C2N). This opened the way for further work in nonlinear integrated optics. Thus, following the completion of his degree, he started a PhD in a joint international project between [Aalto University](#) in Finland and [Paris-Saclay University](#) in France. He is currently dedicating his doctoral research at Aalto University in Finland to the hybrid integration of 2D materials with waveguides for nonlinear photonic applications.

## ACTIVITIES IN FRANCE

Through his visit and collaboration, Vincent Pelgrin aimed to unite the complementary expertise from his current group and the host group, allowing the creation of a new type of hybrid waveguides that will benefit from the best of two worlds. Thus during his stay, he had the opportunity to prepare and characterize the first samples, as well as intend IMEP-LaHC internal seminar and finally get measurement of the active sample.