



## Martin Thebault

**Nationality:** French **Date of birth:** 15/04/1991 **Phone number:** (+33) 628849257

**Work:** LOCIE Batiment Helios, 60 Avenue du Lac Léman, 73370 Le Bourget-du-Lac (France)

### WORK EXPERIENCE

#### Researcher at the CNRS - LOCIE UMR 5271 - Le Bourget-du-Lac

*CNRS - Center National of French Scientific Research* [ 01/10/2021 – Current ]

- Thermal sciences, solar energy, urban climate, GIS, applied mathematics, applied machine learning, fluid mechanics,
- Project Management
- Supervision of PhD and PDoc
- **Sustainability representative** (Annual Greenhouse Gas Emissions report, sustainable development strategy)
- **Open-Data representative** (Réfèrent Données Ouverte, curateur 'Research Data Gouv')
- Teaching (~40h/year) at University Savoie Mont Blanc, M1 and M2 students (Fluid Mechanics, Thermal sciences, Sustainable energies)

#### Junior Chair "Sustainable energies and buildings" - University Savoie Mont Blanc

[ 01/09/2020 – 09/2021 ]

#### Post-Doc. - University Savoie Mont Blanc

[ 02/2019 – 08/2020 ]

### EDUCATION AND TRAINING

#### PhD - Thermal Sciences, Energy and Fluid mechanics

*University of Lyon in cotutelle with UNSW-Sydney* [ 10/2015 – 12/2018 ]

#### Engineer Degree - Grenoble INP - ENSE3

[ 09/2011 – 08/2015 ]

### PROJECTS

#### Project as Principal Coordinator

##### 2020-2024 Junior Chair Grant "Sustainable energies and buildings"

- Role: PI - Amount: ~300k€ (equivalent and support for three Full-time PhD thesis)
- Funding of the PhD of Alexandre Mathieu, Guillaume LeGall, Joyce De Sousa

**2023 PEPS CNRS GAIA (Exploratory CNRS Project** - Generation of high-resolution urban data using Artificial Intelligence for city energy management.)

- Role: PI - Amount: 18 k€
- Drone image acquisition formation, Drone operator license

#### Project as Secondary Investigator/WP leader/Local Coordinator

**2022 - 2025 HELIOS** - NFR Project HELIOS - Enhancing optimal exploitation of solar energy in Nordic cities through the digitalization of built environment. Norwegian National Project

- Role : USMB/CNRS Coordinator Dedicated amount: 17 k€
- Meeting, conference, visit periods.

##### 2023-2027 PEPR - Flextase (French National Programme)

*Programme et Équipement Prioritaire de Recherche Technologies Avancées des Systèmes Energétiques*

- Rôle : WP Co-supervisor Dedicated amount : 100 k€
- PhD Thesis of Farzaneh Changizi

## EXPERTISE AND REVIEWS

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[ Current ]

### Reviewer for national project proposals

- 2025 - PEPS-CNRS ~ 15k€
- 2024 - French National Agency **ANR** ~250k€
- 2023 - Canadian National Agency, **CRSNG** ~525 k\$

**Reviewer for a PhD Thesis** - 2024 - Samule Memme - University of Genoa (Italy)

**Selection Comitee** - 2023 - Assistant Professor position at the University of Lyon

### Reviewer in Journals

Journal of Fluid Mechanics, Physics of Fluids, Building and Environment, Applied Energy, Journal of Photovoltaics, International Journal of Heat and Fluid Flow, Solar Energy, Energy and Conversion Management ...

### Thesis Jury Member

- 2024 - Examiner - Rameez Raja, University Savoie Mont Blanc
- 2022 - Examiner Karine Bouty, University Savoie Mont Blanc

## PUBLICATIONS

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**20 publications in journals, 2 Technical Reports (IEA), 11 International Conferences communications, 4 Open-Acess datasets, 2 Tools**

## MANAGEMENT AND LEADERSHIP SKILLS

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### Co-Leader of the Subtask C of the Task 63- Solar Neighborhood Planning of the International Energy Agency (IEA) 2020-2024

- Coordination of an international group of experts working on performance indicators and tools dedicated to solar modeling at the neighborhood scale.
- Edition and coordination of the writing of two technical reports
- Coordination and management of the subtask (Two deliverables, two task meeting per year, additional sub-task meeting) contributions to other subtasks.

### PhD Supervision

#### **Defended**

- Alessia Boccalatte (33%) - *Oct. 2020 - Dec-2023*. - Cotutelle with University of Genoa - Optimization of PV production accounting for district-scale urban microclimate phenomena. *Currently PDoc INRIA*
- Alexandre Mathieu (25%) - *Mar. 2022 - Mar. 2025* - Modeling performance and fault detection in building-integrated photovoltaic systems.
- Apolline Ferry (50%) - *Oct. 2021- Mar. 2025* - Geospatial analysis and impact of mountainous characteristisc on solar resources

#### **In Progress**

- Farzaneh Changizi (50%) - *Jan.2024 - Now* - Optimization of the Photovoltaic integration on the urban surfaces for improved flexibility
- Guillaume Le Gall (50%) - *Oct. 2022 - Defense scheduled in 2025*. Spatio-temporal analysis of the variability of urban solar resource
- Joyce De Sousa (50%) - *Déc. 2021 - Defense scheduled in 2025*. - Planning and management of large-scale urban solar energy deployment.