

KEYNOTE SPEAKERS



Guillaume CHALMIN

Senior VP Customer Lines OneTech
TotalEnergies

MONDAY – 14H00



Scott MOURA

Professor in Civil & Environmental
Engineering - UC Berkeley

TUESDAY – 09H25



Michael Sprague

Chief Wind Computational Scientist -
National Renewable Energy Laboratory

WEDNESDAY – 09H25



Bruno Raffin

Research Director at INRIA, France -
Lawrence Livermore National Laboratory

WEDNESDAY – 14H25

ROUNDTABLE



Edmond COCHE

Program Manager Wind



Gilles POULAIN

Program Manager Solar



Alexandre BOISSY

Program Manager DER & Applications



Julien CABRERA

Program Manager Hybrid & Storage

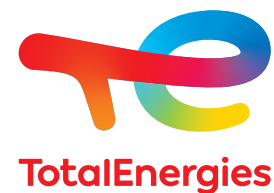


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MATHIAS DAYS



2-5
OCT
2023



Dear Energy & Numerical Science MATHIAS community,

I am glad and proud to welcome you, once again, for our yearly rendez-vous. With the strategy

of the Company targeting to be net zero at 2050 and thanks to the acceleration of the digitalization, the turn to new energies, electricity, energy efficiency and low environmental footprint changes the rules, opening opportunities to challenge the status quo and explore new paths.

The challenges we are facing are tremendous, the world won't be able to cope with the mandatory changes unless Science is embedded from the start.

In the branch **OneTech of TotalEnergies**, we host all R&D activities together with industrialization teams. It brought many talented people, now all together to create ideas, share, develop, scale and deploy with our partners. You are also here, and we count on you!

Would you be a regular participant, or would it be your first **MATHIAS**, I am pretty sure you are about to spend a fantastic moment with all participants, from TotalEnergies or partners, to share and discuss.

You will attend three days of top-level presentations dealing with the state-of-the-art of numerical methodologies, developed for various domains connected to all that Energy could mean and imply. Three days of discussions, meetings, discoveries, and fun!

Let me thank our remarkable keynote speakers who will share their vision, present their activity, their successes, and their questions. Thanks to the organization committee, who prepared this 2023 edition. An edition without Philippe Ricoux who created this event and passed away last year. Let us dedicate these MATHIAS days to his vibrant memory. Thanks to all of you for keeping your mind open and enjoying this **2023 MATHIAS!**

Marie-Noëlle SEMERIA

Monday 02 October 2023

- 12h00 - 13h30: Lunch
- 13h30 - 13h40: Greetings & Safety Moment
- 13h40 - 14h00: Welcome speech Victor
- 14h00 - 14h30: Keynote Guillaume Chalmin
- 14h30 - 14h50: Coffee Break
- 14h50 - 16h10: Parallel sessions
NICE: [Molecular modeling 1](#) | PARIS: [Optimization 1](#)
- 16h10 - 16h20: Coffee Break
- 16h20 - 17h20: Parallel sessions
NICE: [Machine Learning 1](#) | PARIS: [Optimization 2](#)
- 17h20 - 19h30: Free time (17h45: 10km running, 45min yoga or free access swimming pool)
- 19h30 - 21h00: Dinner
- 21h00 - 00h00: Evening 1: Free

Tuesday 03 October 2023

- 07h30 - 08h50: Welcome & Breakfast
- 08h50 - 09h00: Safety Moment
- 09h00 - 09h25: Pitch sessions
- 09h25 - 10h10: Keynote Scott Moura
- 10h10 - 10h30: Coffee Break
- 10h30 - 11h30: Parallel sessions
NICE: [Multi-physics simulation 1](#)
PARIS: [Machine Learning 2](#)
- 11h30 - 11h40: Short Coffee Break
- 11h40 - 12h40: Parallel sessions
NICE: [Multi-physics simulation 2](#)
PARIS: [Carbon Capture & Storage 1](#)
- 12h40 - 14h00: Lunch
- 14h00 - 14h25: PhD Pitch sessions Contest!
- 14h25 - 15h25: Round table program manager POWER
- 15h45 - 17h05: Parallel sessions
NICE: [Wind 1](#) | PARIS: [Carbon Capture & Storage 2](#)
- 17h05 - 17h15: Short Coffee break
- 17h15 - 18h15: Parallel sessions
NICE: [Wind 2](#) | PARIS: [Carbon Capture & Storage 3](#)
- 18h15 - 19h30: Free time
- 19h30 - 00h00: Baby Event & Dinner

Wednesday 04 October 2023

- 07h30 - 08h50: Welcome & Breakfast
- 08h50 - 09h00: Safety Moment
- 09h00 - 09h25: Pitch sessions
- 09h25 - 10h10: Keynote Michael Sprague
- 10h10 - 10h30: Coffee Break
- 10h30 - 11h30: Parallel sessions
NICE: [Machine Learning 3](#) | PARIS: [Batteries 1](#)
- 11h30 - 11h40: Short Coffee Break
- 11h40 - 12h40: Parallel sessions
NICE: [Machine Learning 4](#) | PARIS: [Seismic 1](#)
- 12h40 - 14h00: Lunch
- 14h00 - 14h25: Pitch sessions
- 14h25 - 15h10: Keynote Bruno Raffin
- 15h10 - 15h25: Coffee Break
- 15h25 - 16h25: Parallel sessions
NICE: [Multi-physics simulation 3](#) | PARIS: [Wind 3](#)
- 16h25 - 16h35: Short Coffee Break
- 16h35 - 17h15: Parallel sessions
NICE: [Multi-physics simulation 4](#) | PARIS: [Wind 4](#)
- 17h15 - 17h25: Short Break
- 17h25 - 17h50: Pitch sessions
- 17h50 - 19h30: Free time
- 19h30 - 22h30: Dinner
- 22h30 - 00h00: Big Event

Thursday 05 October 2023

- 07h30 - 08h50: Welcome & Breakfast
- 08h50 - 09h00: Safety Moment
- 09h00 - 09h05: Price Pitch
- 09h05 - 09h35: Keynote Marie-Noëlle Semeria
- 09h35 - 10h00: Coffee Break
- 10h00 - 11h20: Parallel sessions
NICE: [HPC 1](#) | PARIS: [Machine Learning 5](#)
- 11h20 - 11h30: Coffee Break
- 11h30 - 12h30: Parallel sessions
NICE: [HPC 2](#) | PARIS: [Machine Learning 6](#)