



IDEFICS

Informatique, Données et Entreprises
pour la Formation et l'Innovation en
Calcul scientifique et pour la Société

Supporting companies in their use of AI and data science

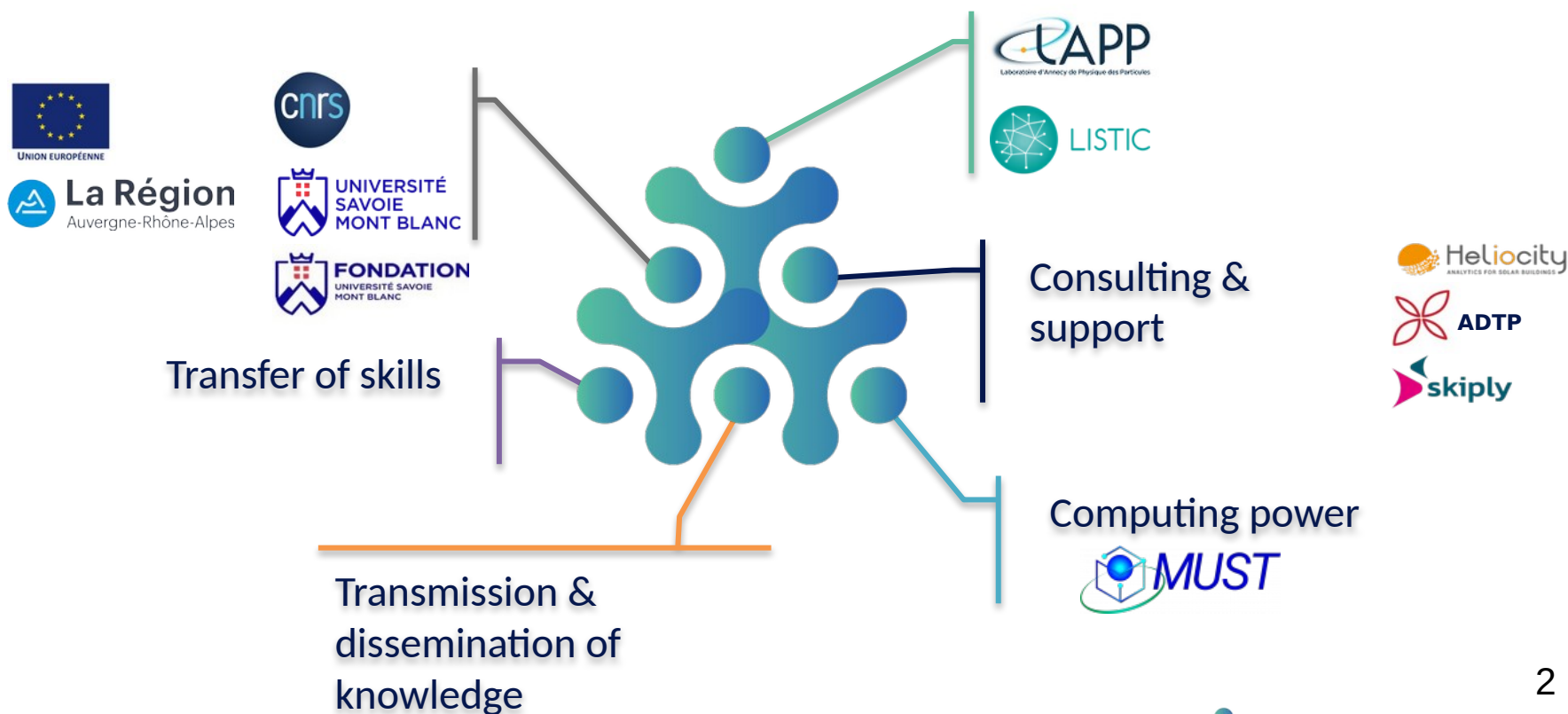
November 2025

Tom François



IDEFICS project

Support digital transition in AI and high computing



IDEFICS: main goals

In exploratory stage: consulting and support

- Technical and scientific support
- 3 levels of service provisions
 - Technical service → mastery on the data
 - Study service → tackle a new challenge
 - Research service → innovative solution
- Provide storage and computing resource

IDEFICS: main goals

To move towards an innovative solution

- The company have people working internally
 - Scientific validation by IDEFICS
 - CDD/PhD supervised by a research lab
 - Optimisation on MUST
 - Transfer of skills
- Or continue the project with the company with occasional intervention of IDEFICS

MUST

Digital platform of CNRS/USMB



Over 8,000 simultaneous tasks, different Intel, AMD, ARM, and GPU architectures

Serving the University's laboratories since 2007

A major node for processing data from the CERN Collider

A local tool for training and using cutting-edge artificial intelligence

<https://www.must-datacentre.fr/>

Training and scientific outreach

- Club Data : Scientific outreach in LAPP/LISTIC
 - Presentation and content by the members about IA and data
 - Examples of subjects: Large language models (ChatGPT & co), a review of normalization methods in neural networks, deep learning applied to Earth sciences, AI as an aid to software development, etc.
 - 1 meeting / month: 1h formal + unformal lunch
 - Special focus on the PhD students (but still open for everyone)
 - <https://idefics.pages.in2p3.fr/club-data/>
- University class and summer schools

The Team

- **Thomas Vuillaume (LAPP, Responsable, data scientist)**
 - **Azza Gamgami (LAPP, cheffe de projet)**
 - **Tom François (LAPP, expert IA)**
 - **Alexandre Benoit (LISTIC, professeur expert IA)**
 - **Frédérique Chollet (LAPP, responsable MUST)**
 - **Maud Coppel (LAPP, responsable communication)**
-
- **Nadine Neyroud (2018-2025, LAPP, ex-responsable)**
 - **Mikael Jacquemont (2018-2022, LAPP, expert IA)**
 - **Brondon Waffa-Pagou (2022-2023, LAPP, expert IA)**

They trusted us

Exemples of IA projects

- Heliocity
 - Anomaly detection for solar cells farm
- ADTP
 - Quality control on a packaging line
- Skiplly
 - Predictive maintenance for smart device.
- Project IMINAR (Cortus and Teledyne)
 - Embedded Predictive AI on non conventional sensors



IDEFICS

Conclusion

- Transfer research knowledge and skills to several private entities
- Way to work on new projects and potentially new technologies:
 - Scientific curiosity
 - Technology watch
- Also a way to work on known technologies in our lab with different use cases (priorities, context, paradigm, ...)



IDEFICS

Informatique, Données et Entreprises
pour la Formation et l'Innovation en
Calcul scientifique et pour la Société



IDEFICS est cofinancé par la région Auvergne Rhône-Alpes et l'Union Européenne dans le cadre du Fonds Européen de Développement Régional (FEDER).

