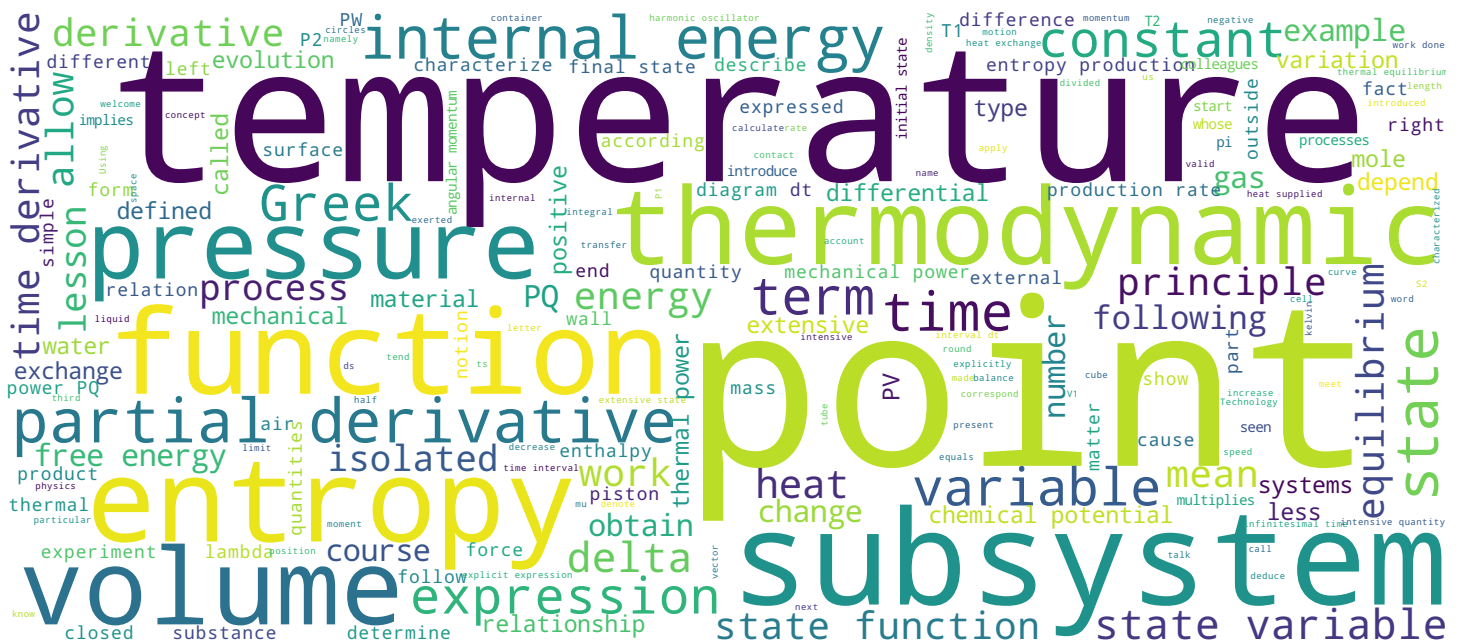
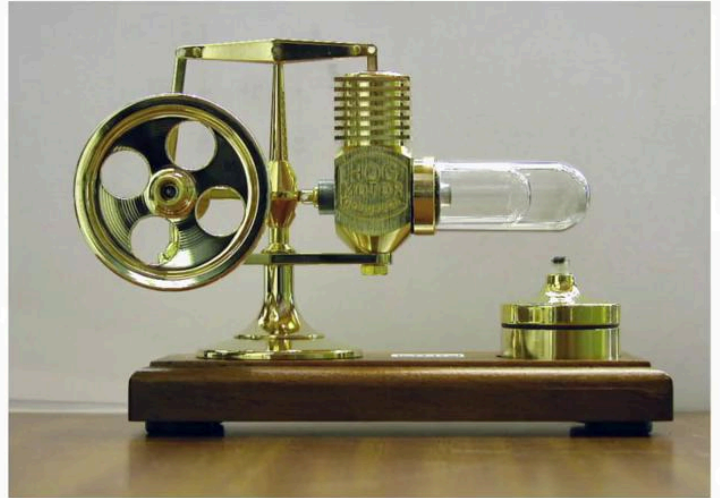


Thermodynamique





Thermodynamique

Hello. Welcome to this thermodynamics course. My name is Jean-Philippe Ansermet, I am a physics teacher at the Swiss Federal Institute of Technology in Lausanne.

Notes

Summary

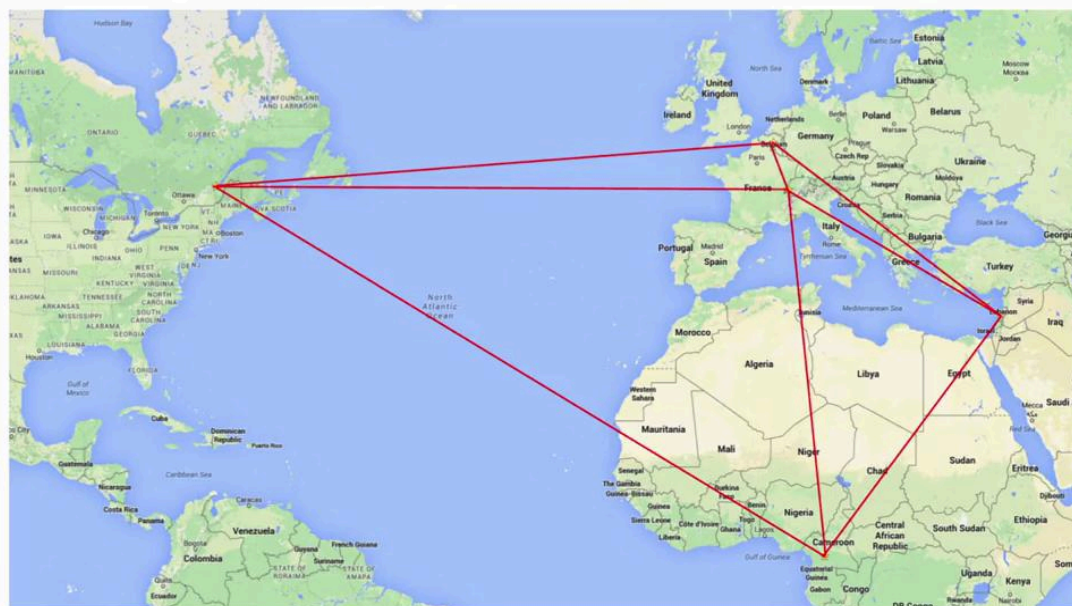


0m 04s



RESCIF

Réseau d'excellence
des sciences de l'ingénieur
de la Francophonie



Thermodynamique

I have put together this course in collaboration with with colleagues from the Récif network of French-speaking universities.

Notes

Summary



0m 15s



Thermodynamics is part of the basic training of scientists and engineers because that it allows to describe any kind of domain.

[illegible]

Summary





Of course, the management of our energy resources is a global issue and thermodynamics allows to make a quantitative analysis. But thermodynamics is also valuable because it allows to establish relationships between phenomena of different nature. Teachers will present the chapters in which they specialize. I will meet you at each lesson with videos of experiments illustrating the concepts they have introduced.

[illegible]

Summary





- Troisième partie :
phénomènes de transport

- Milieux continus
- Relations phénoménologiques
- Loi de Fourier
- Loi de Fick
- Loi d'Ohm
- Équation de diffusion
- Effet Seebeck

Thermodynamique

The course begins with four lessons. Which define the conceptual bases and the tools of thermodynamics. I then give the floor to a succession of colleagues who will show you how the thermodynamics applies to particular cases. The course ends with an introduction to the physics of continuous media. This allows for the presentation of transport phenomena in a unified framework. Einstein had expressed his admiration for thermodynamics. I would like you too you become fans of this often dreaded subject.

Notes

Summary



1m 02s