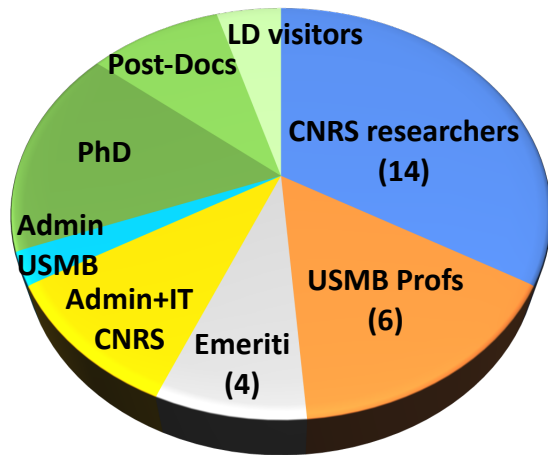


# Annecy-le-Vieux Theoretical Physics Laboratory

UMR CNRS/INP – Université Savoie Mont Blanc

At 01/09/2021



≈ 40-45 people on average



Labex



Federation



Ambitious visitor program

On average (pre-COVID-19) 90 visitors/yr

High-visibility international initiatives

Promotion and coordination of two LIA/IRP

International conference series, like

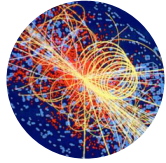
- PhysTeV@Les Houches since 1999
- RAQIS since 2003
- DSU in 2018 (first time in France)

International teaching/PhD programs

Popular science & open doors initiatives



## Particle Physics



Standard Model, exploitation of LHC results  
Precision calculations in Higgs physics  
Flavour physics  
New physics (Beyond SM)  
Dark matter models and phenomenology

collaboration with  
ATLAS and LHCb

collaboration with  
LPSC TH (UGA)

**PAGE**

## Astroparticle and cosmology



Early universe: nucleosynthesis, neutrinos...  
Multimessenger (astro)physics (cosmic rays, gamma-rays...)  
Dark matter identification (indirect searches, alternative candidates)

collaboration  
With HESS & CTA

collaboration  
with VIRGO members

collaboration with  
LPSC (UGA)

## Mathematical Physics



Integrable Systems : algebraic aspects, applications to  
out-of-equilibrium statistical & condensed matter physics  
Scattering amplitudes in quantum field theory & string theory  
Formal aspects of quantum field theories

collaboration  
with MPI Munich

**PEM**

collaboration  
with LiPhy (UGA)