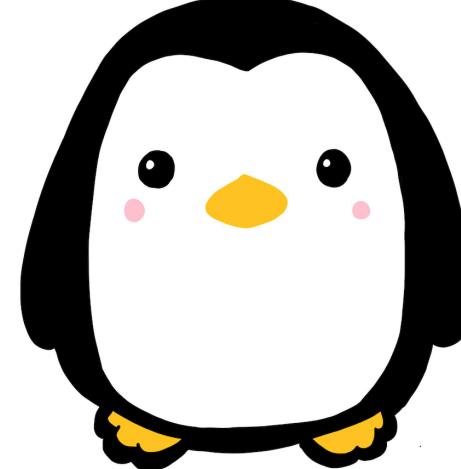


b-baryon Fest

5-6 Nov 2020

Yasmine Amhis, Carla Marin Benito, Sébastien Descotes-Genon, Danny van Dyk

$\Lambda_b \Xi_b \Omega_b \Lambda_b \Xi_b \Omega_b$
 $\Xi_b \Omega_b \Lambda_b \Xi_b \Omega_b \Lambda_b$



INTENSITY
frontier
GDR-InF

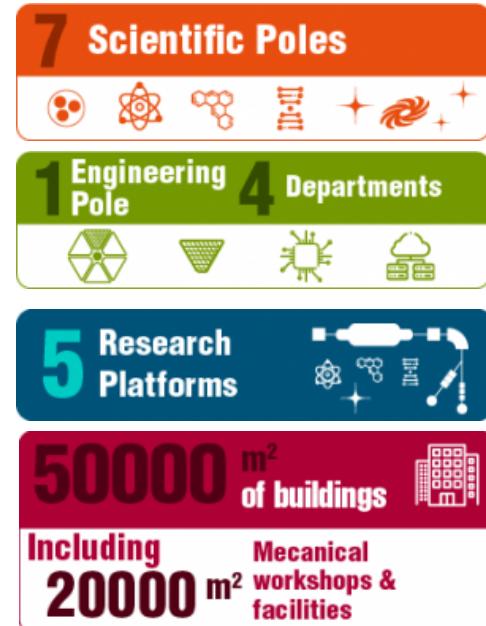
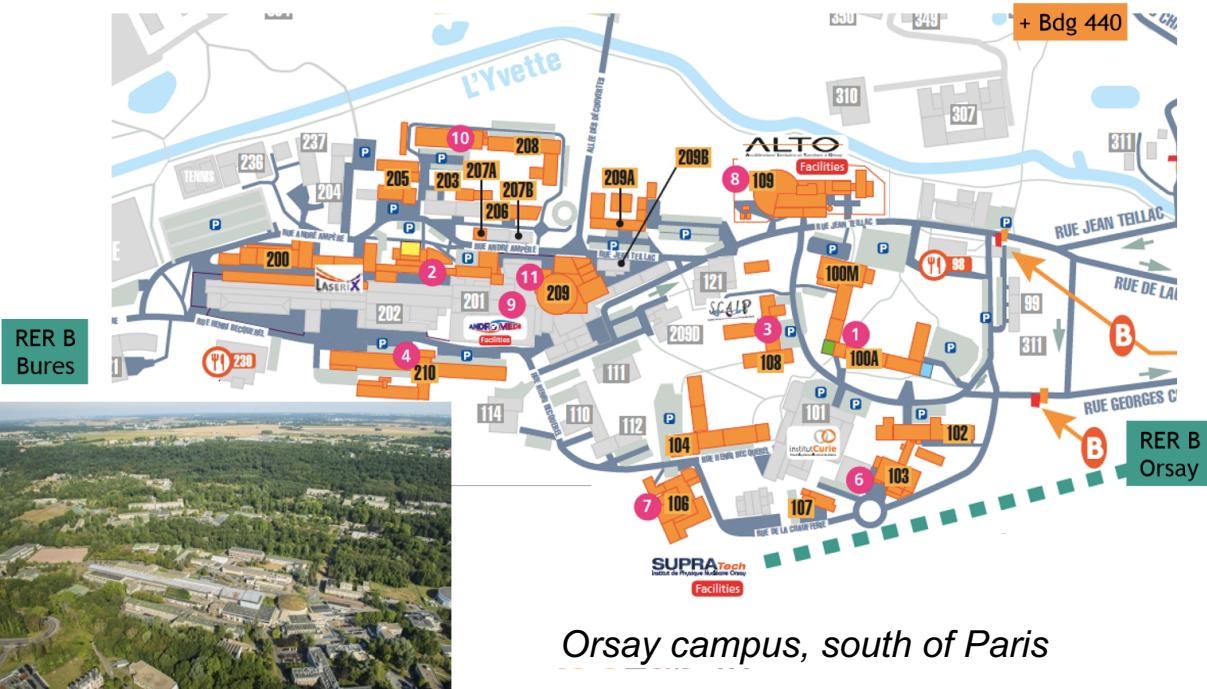
iJCLab
Irène Joliot-Curie
Laboratoire de Physique
des 2 Infinis



Welcome to IJCLab... or Zoom x IJCLab...

Laboratoire de Physique des 2 Infinis Irène Joliot-Curie = **IJCLab**

Created Jan 1st 2020 from merger of Orsay laboratories : CSNSM, IMNC, IPN, LAL, LPT



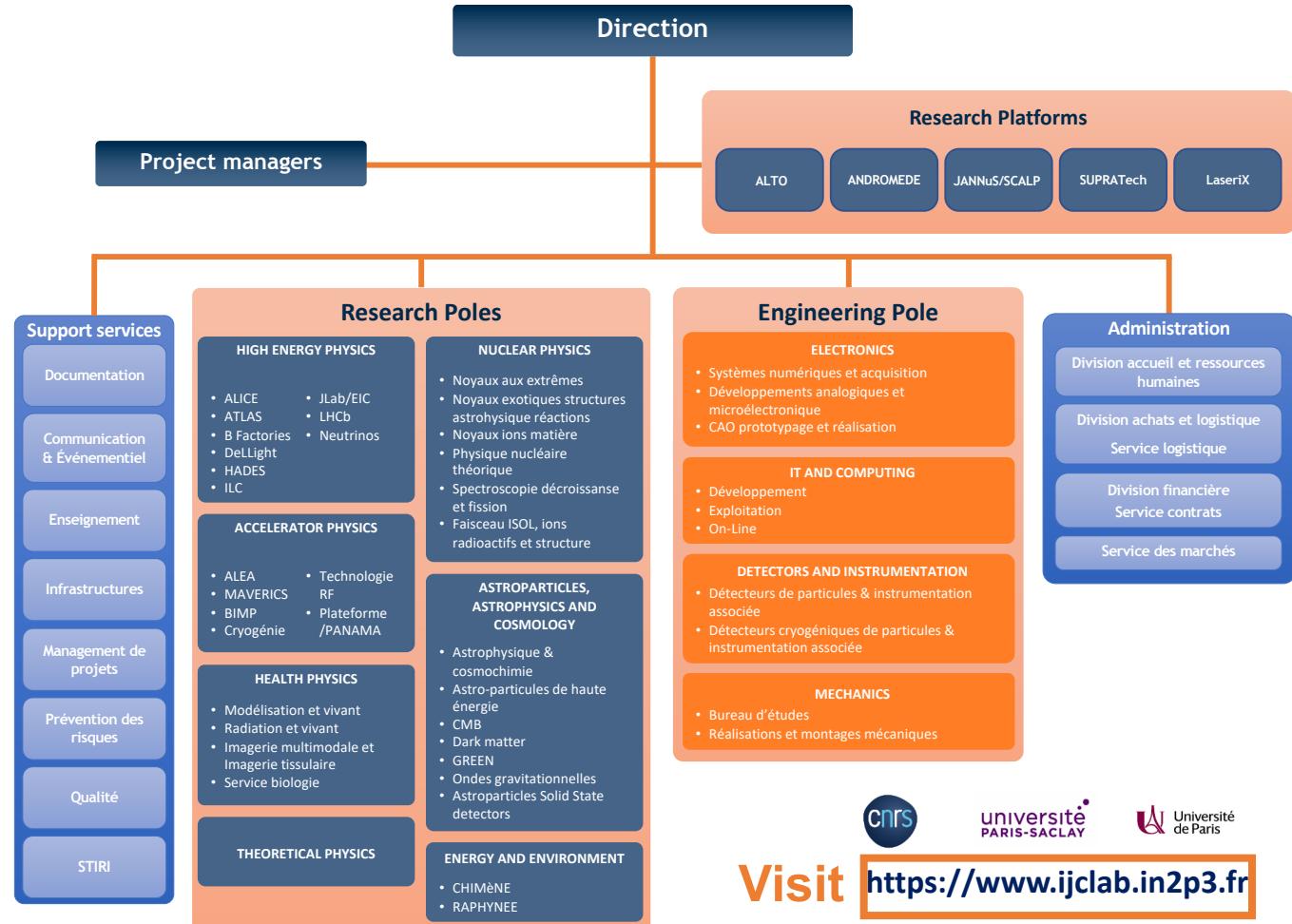


Welcome to IJCLab

IJCLab = "Orsay" for HEP
but also much more

- Astro/Cosmo
- Nuclear Physics
- Theory
- Accelerator Physics
- Energy and environment
- Health physics
- Associated engineering
- Research platforms

CNRS/IN2P3 together with
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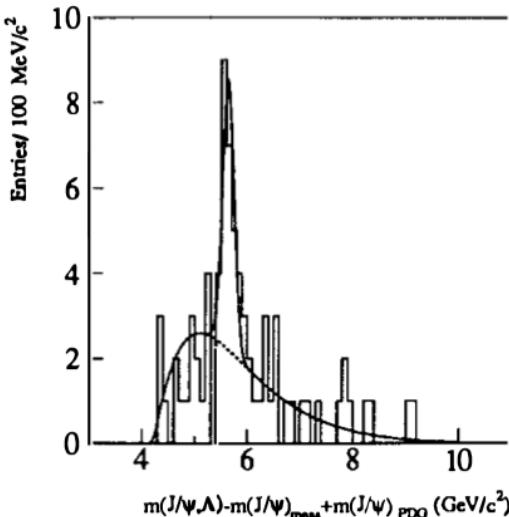
<https://www.ijclab.in2p3.fr>



b-baryon Fest ?

Exciting times for b-physics

- LHC : LHCb, CMS, ATLAS
- B-factories : Belle II
- Anomalies in B-meson SL and rare decays
- Invitation to explore new hadronic playgrounds



- First observation of $\Lambda_b \rightarrow J/\Psi \Lambda$ at UA1 30 years ago (1991)
- Λ_b studied at LEP, Tevatron and now LHC !
- Quite abundant e.g. @LHCb : $f_{\Lambda_b}/(f_u + f_d) \sim 0.26$
- Spin as new dof (form factors, EFT, LCSR and lattice...)
- Ang analysis for decays into Λ_c or Λ decaying hadronically
- Experimental identification with its own challenges

Theo and exp systematics different from B-meson
+ Spectroscopy and decays of other b-baryons





b-baryon Fest !

Thursday

Production,
theo appr,
hadronic

10:00
11:00
12:00

Opening	Sebastien DESCOTES-GENON et al.
	09:50 - 10:00
Lb fragmentation fraction: Status @ LHCb	Anna Lupato
	10:05 - 10:25
Lb fragmentation fraction: New approach using hadronic decays	Dr Tobias Huber
	10:35 - 10:55
Lb Light-Cone Distribution Amplitudes and their Applications	Prof. Thorsten Feldmann
	11:05 - 11:25
Lb → L { Jψ, μ⁺+μ⁻ }	Tom Blake
	11:35 - 11:55

Theo determ
of properties,
radiative
and rare

14:00
15:00
16:00

Lb lifetime	Prof. Alexander Lenz
	14:00 - 14:20
Lb → L(1115) gamma @ LHCb	Carla MARIN BENITO
	14:30 - 14:50
Lb → L: non-local contributions	Danny van Dyk
	15:00 - 15:20
Prospects for Lb analyses with CMS parked data	Sergey Polikarpov
	15:30 - 15:50
Lb → {L(1120), L(1520)} and Lb → Lc(*) form factors from lattice QCD	Stefan Meinel
	16:00 - 16:25

Friday

SL decays
+ other b-
baryons

Lb → Lc μ ν in HQET	Zoltan Ligeti
	10:00 - 10:20

Lb → Lc μ ν @ LHCb	Abhijit Mathad
	10:30 - 10:50

Angular Analysis of Lb → Lc (→L π) μ νubar	Jan-Niklas Toelstede
	11:00 - 11:15

Xib → Xi {γ, Jψ, μμ}	Luis Miguel Garcia Martin et al.
	11:25 - 11:45

12:00

Measurement of alpha in ee → L(→p π) Lbar(pbar π) production on the J/ψ resonance	Andrzej Kupsz
	14:00 - 14:20

R(Lambda) prospects and R(pK) results	Mick Mulder et al.
	14:30 - 14:50

LFV in Lb decays	Paul Swallow
	15:00 - 15:10

Lb → L(1520) sensitivity study	Anja Beck et al.
	15:20 - 15:40

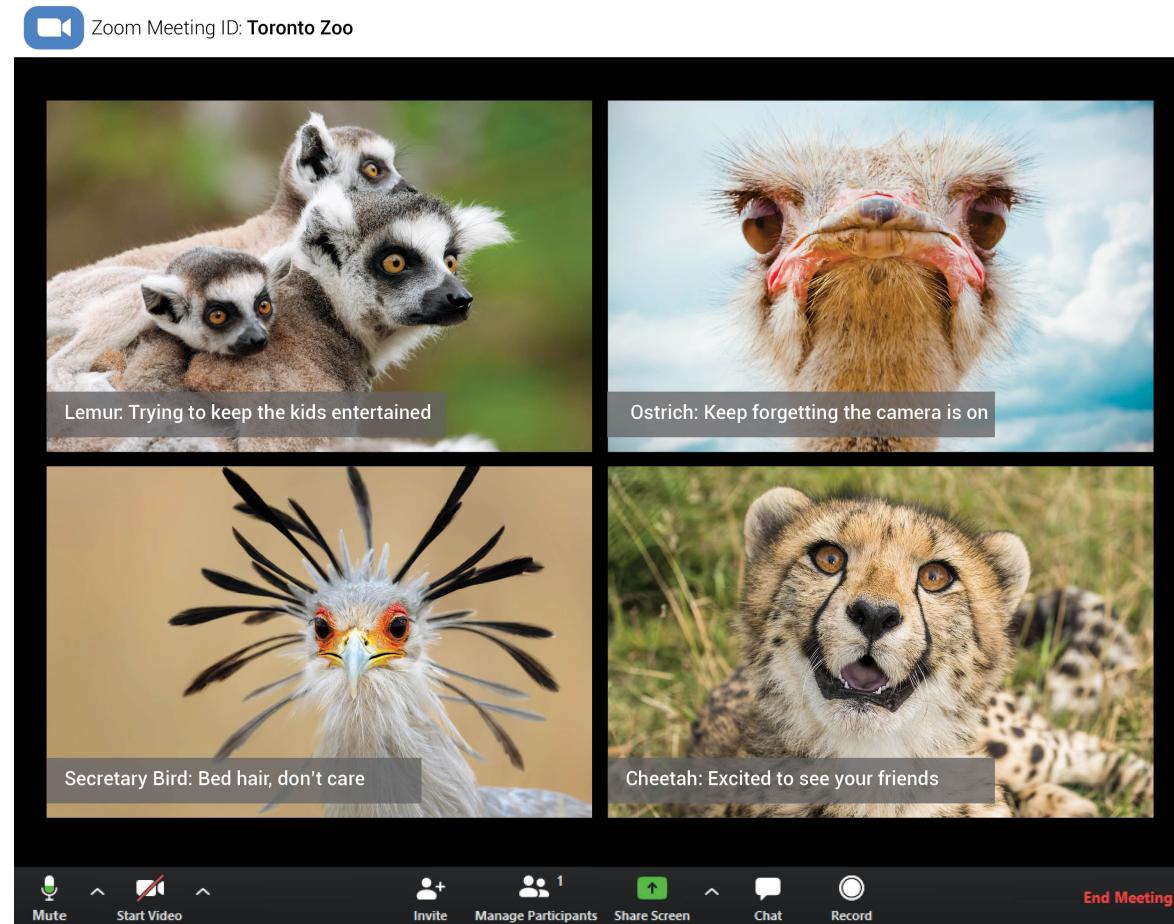
wrap-up	
	15:50 - 16:00

Pheno
Rare
decays



Before starting

- Very happy to have ~ 50 registered participants
- No coffee break and no conference dinner, alas...
- Zoom, yes, but let us try to keep it informal and lively...
- Do not hesitate to intervene by raising your (virtual blue) hand and/or directly asking the question
- Please turn on your camera if possible when you speak
- Do not forget to put your slides on indico





And now, let the (b-baryon) Fest start !

