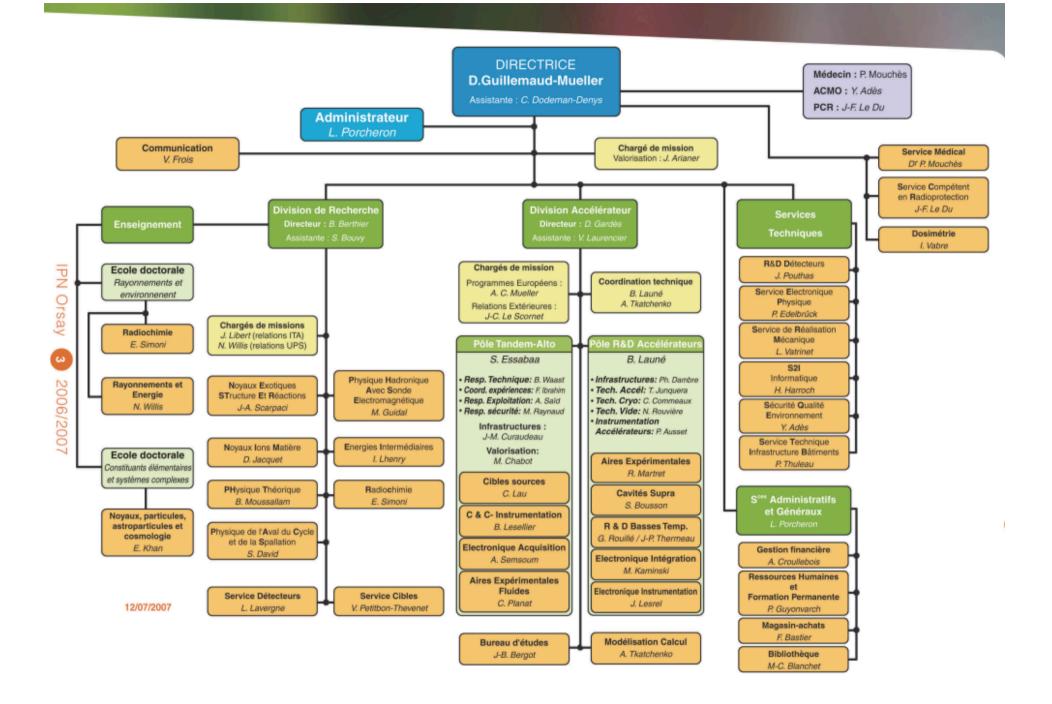
# **IPN** Orsay

J.E Campagne 27/10/2009

#### Procedure

- Rapport d'activités
- Comptabilisation du # de chercheurs par "groupe" mais les ITA sont associés au rapport par "manip"
- Aucune information sur les budgets



#### Nuclear Structure: 15p

- Measurements of production yields, for mass-separated fission fragments, at ALTO: 17p
- First measurement of isoscalar giant resonances in a short-lived nucleus : 56Ni: 9p
- Decay pattern of pygmy states in the neutron-rich nucleus 26Ne: 7p
- Lifetime measurement of the sixquasiparticle isomer in 140Nd and of the three-quasiparticle isomer in 139Nd: 13p
- Neutron correlations in 6He viewed through nuclear break-up reactions: 10p
- Indirect study of the astrophysical reaction13C(α,n)16O via the transfer reaction13C(7Li,t)17O: 13p

- Missing-mass spectroscopy of the neutron deficient nucleus 12O using the MUST2 array: 13p
- Study of neutron-deficient tellurium isotopes by laser spectroscopy: 11p
- β+/EC decay of 189m+gPb, identification using hyperfine spectra: 3p
- Structure of low-spin states of the doubly-odd 182Ir nucleus: 8p
- A copper beam with the off-line laser ion source: 11p
- Test of new LaBr3 scintillators for nuclear-state lifetime measurements at ALTO: 4p

### Hadronic Physics & Matter: 12p

- Study of generalized parton distributions at Jefferson laboratory: 5p
- G0 back angles: 4p
- The PVA4 parity violation experiment: 8p
- Simultaneous photoproduction of η and π° mesons on the proton at GRAAL: 4p
- Double π° photoproduction on the neutron at GRAAL: 4p
- Distillation of HD gas and measurement of spin-lactice relaxation times: 4p
- GEp III: 1p
- Installation of the ALICE dimuon forward spectrometer — study of heavy flavors production in the color glass condensate model: 27p\*

- Status of the HADES experiments: Heavy ion reactions: 6p
- Preparation of future experiments at PANDA: 10p
- PHENIX: 6p
- Evidence for low mass mesonic structures: 1p
- Contribution to the study of narrow low mass hadronic structures: 1p

#### Astroparticules: 8p

• Pierre Auger southern observatory: 8p

## Theoretical physics: 20p\*

- Identification of the K\*0(800) scalar resonance in pion-kaon scattering: 1p
- Naturalness of order six chiral coupling constants: 1p
- Precision tests of non-standard electroweak couplings of quarks: 2p
- Single and double phonon excitations : configuration interaction study and second RPA: 1p
- Evolution of shell structure bubbles in nuclei far from the stability: 4p
- Low energy excitations in nuclear systems: from exotic nuclei to the crust on neutron stars: 4p
- Signs of dynamical effects for Cd, Sn, Te, Xe, Ba and Sm nuclear charge radii: 3p
- Three-body problem ; integrable systems: 3p
- Inverse problem in the case of bound states: 2p

- Response function in homogeneous nuclear matter: 2p
- Unbound exotic nuclei studied by projectile fragmentation: 1p
- Li spectrum from 11Li fragmentation: 1p
- The T=0 effective interaction in 14N
  and 10B: 1p
- ...

\*: dont 5 "bénévoles"

### Hot Nuclei: 12p

- Freeze-out properties of multifragmenting single source events produced in central Xe+Sn collisions: 6p
- Size hierarchy and fluctuations of observables in fragmentation of excited heavy nuclei: 5p
- Bimodal behaviour of the heaviest fragment distribution in projectile fragmentation: 4p
- Dynamical simulation studies of isospin diffusion in semi-peripheral collisions: 3p
- Super heavy elements stability probed by fission time measurements: 3p

## Energy & environment:~10p

- Mineral surfaces—actinides interactions studies : spectroscopic,theoretical and thermodynamic approaches: 8p
- Studies on oxide and phosphate based matrices loaded with actinides : sintering and dissolution: 5p
- Prediction of ligand promoted dissolution rates of ThO2 from the reactivies of aqueous complexes. Dissolution behavior of Th1-xPuxO2: 2p
- Speciation of uranyl in the presence of chloride and bromide ions in room temperature ionic liquids: 6p
- Characterization of corrosion products formed on leached UO2 after alpha irradiation by luminescence spectroscopy: 2p
- Study of uranyl interaction with senelite and mellitata by TRLIFS: 3p

- Synthesis, electrochemical characterization and dissolution of uranium monocarbide (UC): 4p
- MURE: MCNP Utilities for Reactor Evolution: 5p
- MURE Simulations: The Thorium Cycle. Fast Reactors: 5p
- Fission cross sections of actinides at nTOF, from resonances to spallation: 9p
- CACAO: a laboratory project for the production and characterization of radioactive targets: 6p

#### Particle Matter Interaction:~5p

- Study of channelling effects in silicon detectors for pulse shape applications: 5p
- Molecular fragmentation measurements with the AGAT detector at the TANDEM facility : an astrochemical application: 4p
- Massive clusters. Secondary emission from the keV to the MeV region : a new SIMS probe: 3p
- SAHAT : an Hydrocarbone Anion Source at the TANDEM facility: 2p