# CCIN2P3 & GRIF status report

## March 18th 2010

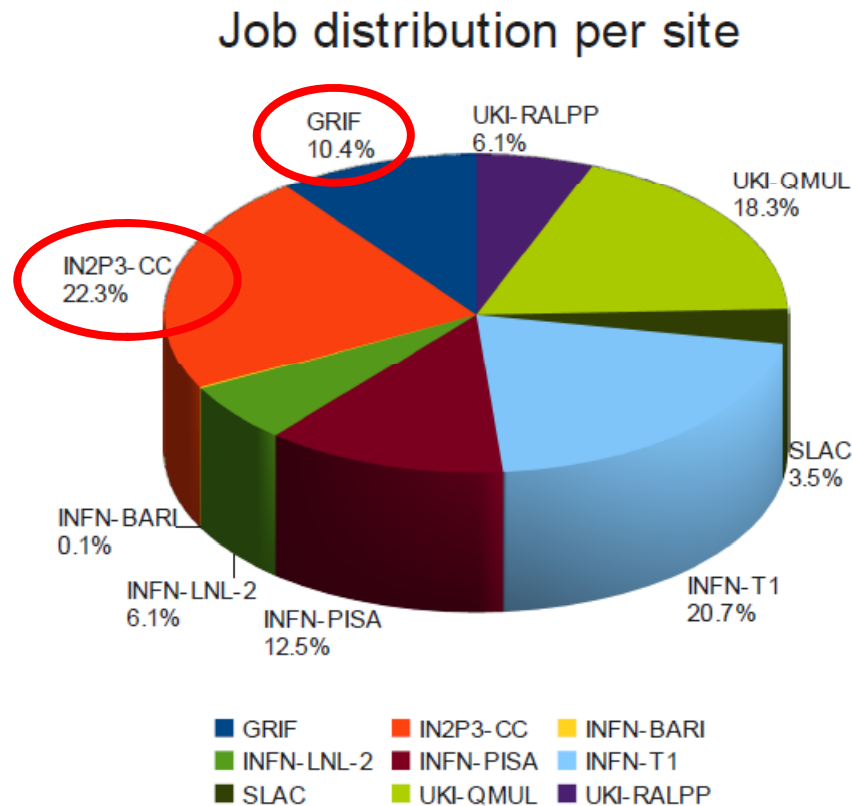## Nicolas Arnaud (LAL–Orsay)



- Contributions of CCIN2P3 and GRIF to the February production
- CCIN2P3 vs. GRIF
- Toward next production(s)

# Contributions to recent FastSim production

- From Armando's plenary talk on Tuesday morning:

## Job distribution per site



| Site Name | Jobs done | Events generated |
|---|---|---|
| GRIF | 2081 | 183650000 |
| IN2P3-CC | 4457 | 383930000 |
| INFN-BARI | 29 | 2850000 |
| INFN-LNL-2 | 1214 | 120070000 |
| INFN-PISA | 2505 | 183310000 |
| INFN-T1 | 4143 | 284660000 |
| SLAC | 699 | 69900000 |
| UKI-QMUL | 3672 | 337745000 |
| UKI-RALPP | 1217 | 94025000 |
| **TOTAL** | **20017** | **~ 1.7x10^9** |

- CCIN2P3: 22.3% → First site!
- GRIF: 10.4%

1/3 of the total production

# More on the FastSim production

- I worked on the sites setup but not on the production itself
  $\Rightarrow$ Experience from Armando and Luca is essential

- In particular:

| Site Name | Jobs done | Events generated | Jobs failed | |
|-----------|-----------|------------------|-------------|------|
| GRIF | 2081 | 183650000 | 169 | 7.5% |
| IN2P3-CC | 4457 | 383930000 | 293 | 6.2% |

  $\rightarrow$ Job failure analysis!?

- Other questions:
  - What defined/limited the # of jobs submitted to a given site?

- Thanks to Michel Jouvin (GRIF)
  Vincent Bel & Pierre Girard (CCIN2P3)

# CCIN2P3 vs. GRIF

- CCIN2P3 (http://cc.in2p3.fr/ ): official computing center for the IN2P3 (~ 20 labs), used by most of the experiments in which IN2P3 is involved.
  - Tier center, simulation, analysis, etc.
  - Ressources officially requested in 2010 for SuperB
    - → CPU: ~27% of BaBar request for 2010
      [will know by the end of the month which fraction was used by Feb. production]
    - → AFS group area of 20 GB + 15 TB storage on NFS
    - → Grid ressources: software area of 8 GB + 500 GB on the SE (dcache)
  - Big center in which SuperB is a 'small' experiment
    - → Hard to get tailored intervention; SuperB needs to adapt to the existing framework (e.g. no yum) rather than the opposite
    - → Helped Marco Corvo test his standalone installation script; success at the end
  - All collaborators working on a project approved by IN2P3 (SuperB TDR) can get an account at CCIN2P3 and use its ressources (batch, etc.)
    - → BaBar is using CCIN2P3 a lot: analysis, simulation, skimming, etc.
    - → Accounts can now be requested by non-IN2P3 SuperB members
  - Bruno is running at CCIN2P3
    - → Center could be used for future FullSim production either

# CCIN2P3 vs. GRIF

- GRIF: Grille Régionale de l'Ile de France ([http://www.grif.fr/](http://www.grif.fr/))
  « GRIF is a joint initiative from 5 CNRS/IN2P3 laboratories and CEA/IRFU
  (ex: CEA/DAPNIA), all located in Paris region, in order to build a major grid resource. »
  - Smaller center located in a LAL-Orsay building
    → Easier access to admins…
  - Center funded by various partners (biology institutes, ATLAS, etc.)
    → No guaranteed access for IN2P3-supported experiments
  - 'Parasitic' free access to the ressources for the Feb. Production
    → Biologists bought much more CPUs than what they currently need ☺
    → LHC not at full speed yet
    → Conditions for next production(s) may be less favourable

- Points common to both centers:
  - All machines are SL5 64-bits
    → Impossible so far to compile FastSim locally

# Towards next production(s)

- The more sites the better
  $\rightarrow$ SuperB should maintain access to both CCIN2P3 and GRIF !

- Money investment seems to be the right way to secure GRIF access in the future
  $\rightarrow$ I was told the following prices:
    - 1 k€by TB of storage
    - 2 k€by 8-core machine

- Will need to request CCIN2P3 ressources for 2011 in November
  $\rightarrow$ Help will be needed to make it realistic and useful for SuperB
  $\rightarrow$ More ressources could likely be asked if the project is finally approved

- Caveat: I'm a busy-enough physicist and not a computing expert
  $\rightarrow$ I can help passing on information between sites and SuperB, make small tests
    but not much more than that (in particular no real development)
  $\rightarrow$ BaBar has a dedicated people working at CCIN2P3