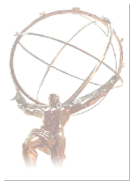
ATLAS MC-production in Russia

January-September 2006

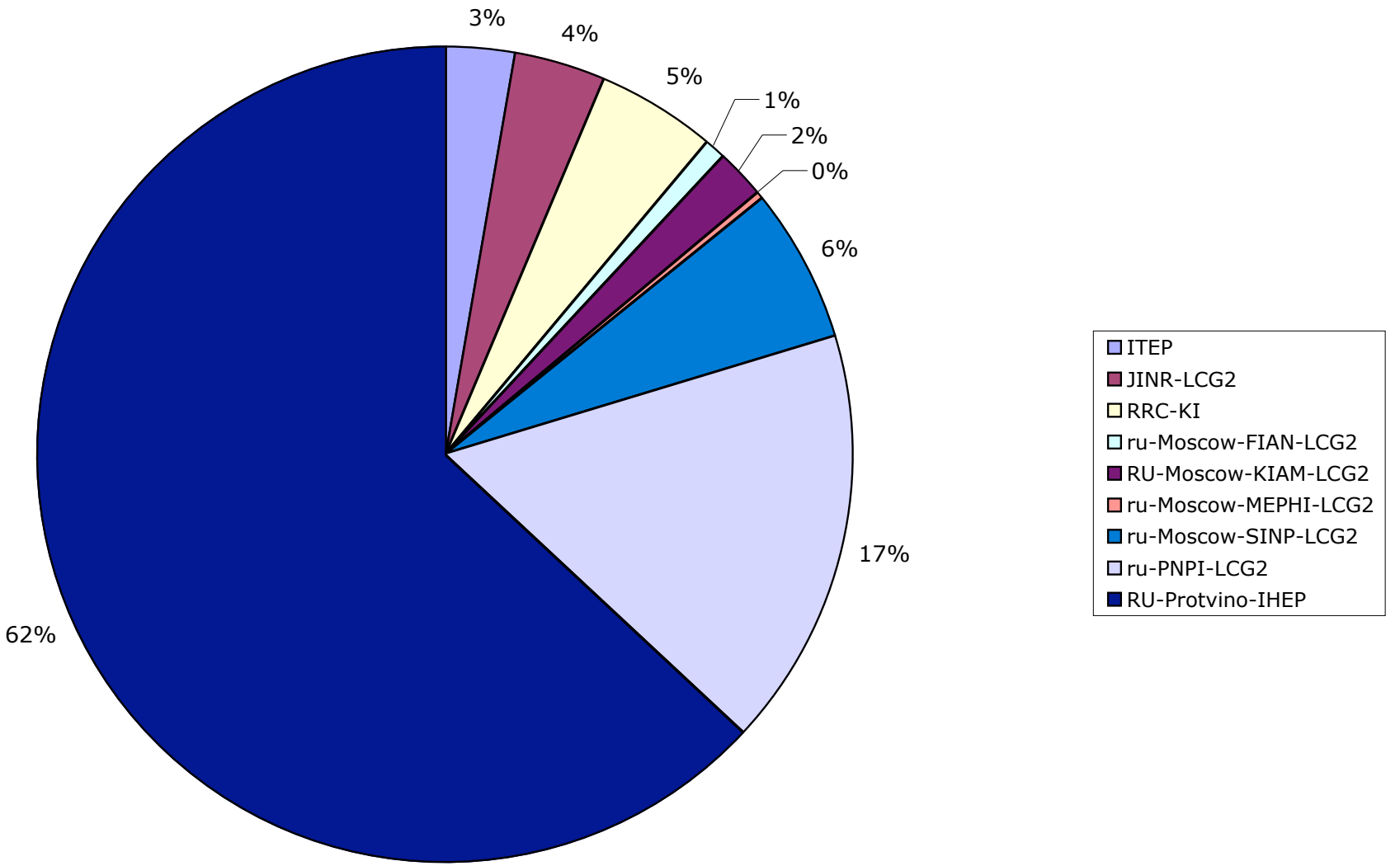
MC-production in Russia



- From Grid Operation Center:
  - Wall Time: 24614 kSI2k-days
    - 42.7 % of Grid use in Russia (all VOs)
  - Number of jobs: 53803
    - 15.7% of total number of jobs

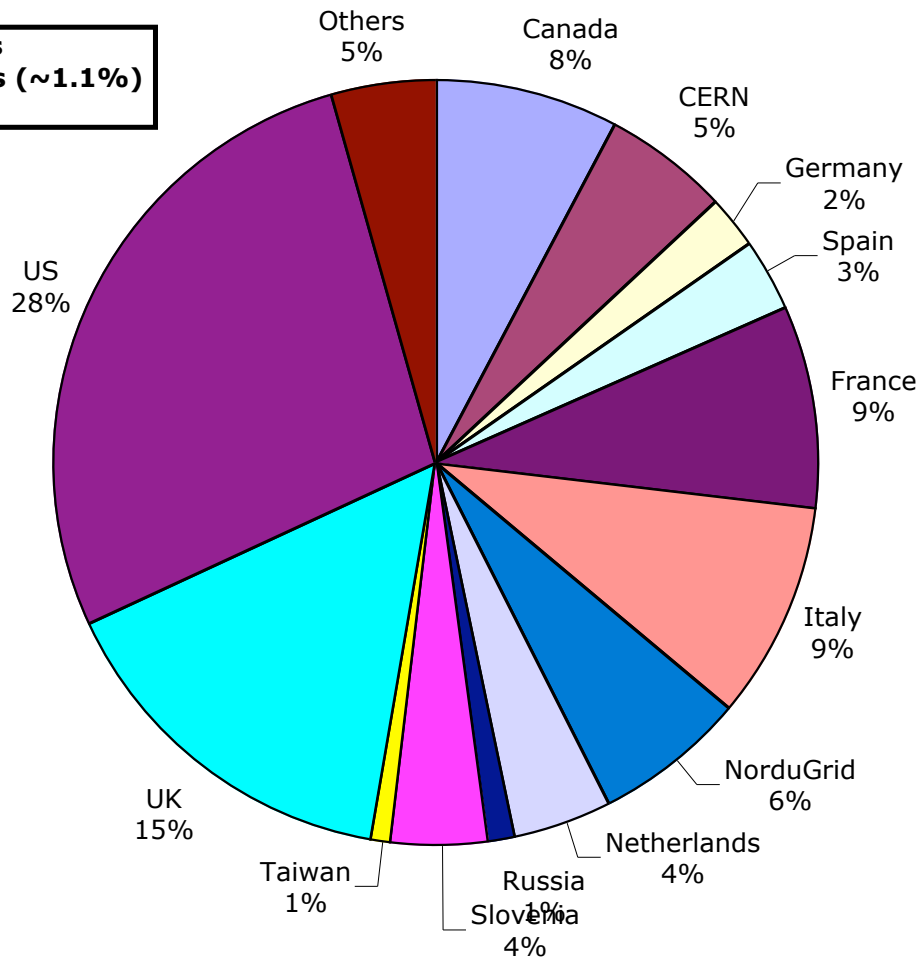
- From ATLAS production database
  - Wall time: 3504 kSI2k-days
  - Number of Jobs: 6330

ATLAS production in Russia from Grid Operations Center



ATLAS Production (Jan-Sep 2006)

Total: 311000 kSI2k-days
Russia: 3504 kSI2k-days (~1.1%)



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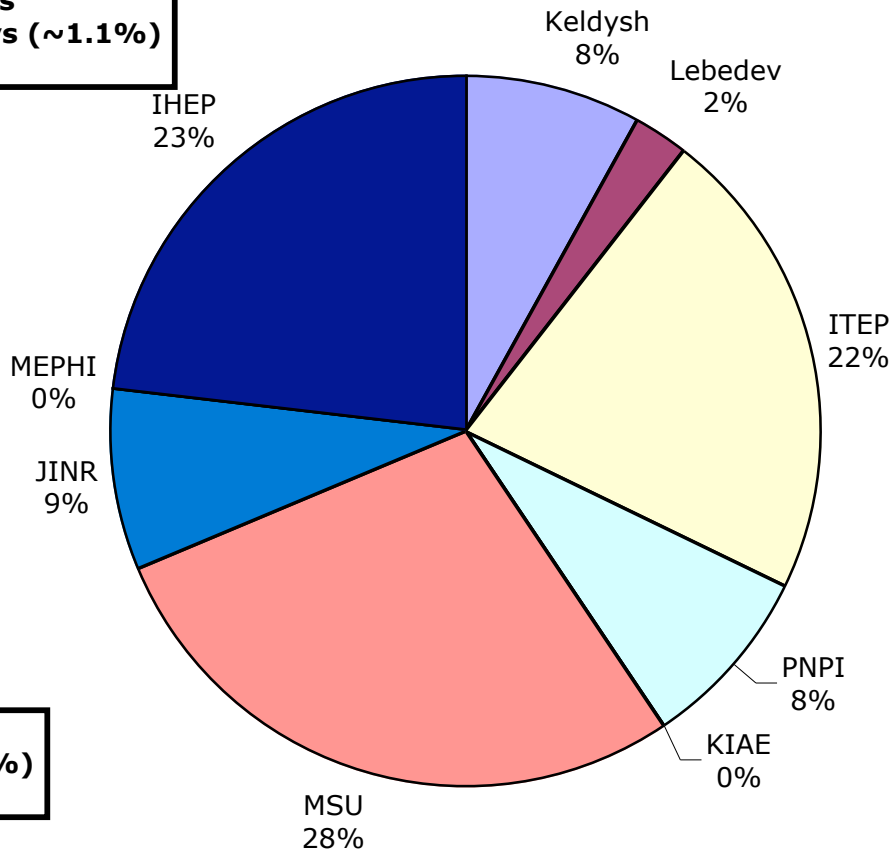
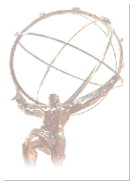


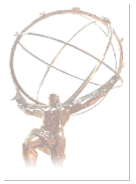
Total: 795000 Jobs
Russia: 6330 Jobs (~0.8%)

Forthcoming productions



- Assuming:
  - 60% of production is performed at Tier-2s
  - No inefficiency taken into account
  - CPU time needed per event
    - MC Simulation; 700 kSI2k.seconds
    - Digitization and Reconstruction: 40 kSI2k.seconds
  - Sizes per event
    - Hits: 2 MB
    - ESD: 1 MB
    - AOD: 0.1 MB
- Resources for 10 M events in 3 months, with no inefficiency
  - CPU: 3250 kSI2k.months
  - Hits: ~ 20 TB; ESD: ~ 10 TB; AOD~ 1 TB

Productions in Russia



- Assuming that
  - 40% performed at Tier-1s and 60% at Tier-2s
  - Russian Tier-2 is 7.3 % of full Tier-2 resources
- Data is produced at Tier-2 and replicated to associated Tier-1 (NIKHEF/SARA)

	Number of events (Million)	CPU Power kSi2k	CPU for 3 months kSI2k.months	T1D0 (Hits) TB	T1D1 (ESD) TB	T0D1 (AOD) TB
Q4-2006	20	95	285	1.8	0.9	0.1
Q1-2007	48	227	682	4.2	2.1	0.2
Q2-2007	96	455	1365	8.4	4.2	0.4