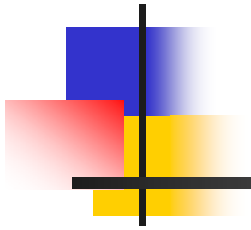
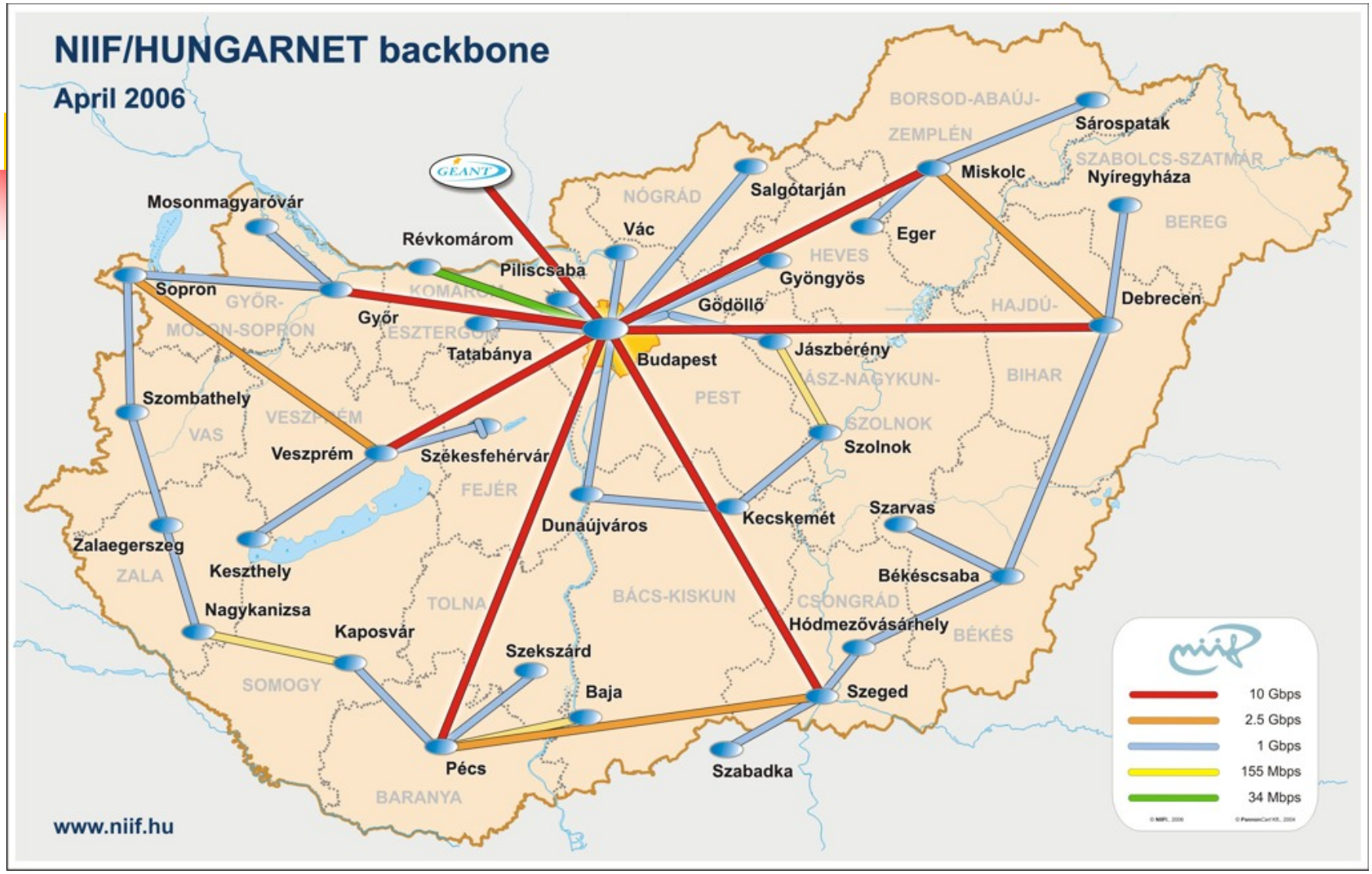
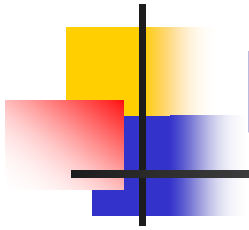


(HEP) GRID Activities in Hungary

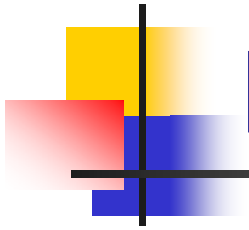
Csaba Hajdu
KFKI RMKI
Budapest


NIIF/HUNGARNET backbone
April 2006
GÉANT
Mosonmagyaróvár
Révkomárom
Piliscsaba
Vác
Salgótarján
Sárospatak
Miskolc
Nyíregyháza
Eger
Gyöngyös
Sopron
Győr
Gödöllő
Debrecen
Tatabánya
Budapest
Jászberény
Szombathely
Veszprém
Székesfehérvár
Szolnok
Dunaújváros
Kecskemét
Szarvas
Zalaegerszeg
Keszthely
Békéscsaba
Nagykanizsa
Kaposvár
Hódmezővásárhely
Szekszárd
Baja
Szeged
Pécs
Szabadka
BORSOD-ABAÚJ-ZEMPLÉN
SZABOLCS-SZATMÁR-BEREG
NÓGRÁD
HEVES
HAJDÚ-BIHAR
JÁSZ-NAGYKUN-SZOLNOK
PEST
GYŐR-MOSON-SOPRON
KOMÁROM-ESZTERGOM
VESZPRÉM
VAS
ZALA
FEJÉR
TOLNA
BÁCS-KISKUN
CSONGRÁD
BÉKÉS
SOMOGY
BARANYA
10 Gbps
2.5 Gbps
1 Gbps
155 Mbps
34 Mbps
www.niif.hu



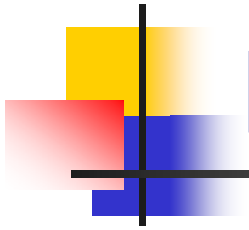
National Grid Initiative

- Not really, but something near to it:
  - Hungarian Grid Competence Center
    www.mgkk.hu
    - 2003 – five most active grid participants
    - 2 universities – BME, ELTE
    - 2 reserch institutes – SZTAKI, RMKI
    - + network operator/developer - NIIF



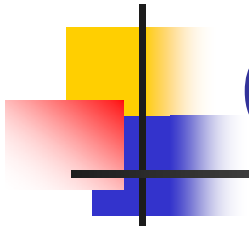
Funding

- Individual grants, no real coordinated efforts
- Joint effort by MGKK for a larger grant not successful in 2005
- National Development Plan 2007-2013 >50 million EUR



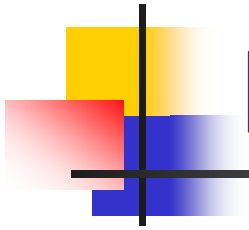
HunGrid VO

- General purpose scientific and educational national VO – students and other people wishing to learn or experiment with grids can become members easily
- SZTAKI, RMKI, ELTE and a few other sites support it
- Ramping up stage - advertised to both users and sites wishing to join
  - http://www.grid.kfki.hu/?hungrid&hungridgeneral



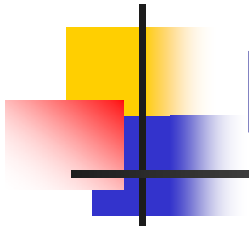
Clustergrid

- General purpose grid project
- ~1000 CPUs, ~30 TB (~30 labs from ~20 universities)
- Collection of Condor pools in night+weekend operation mode
- LCG – Clustregrid gateway under consideration (not easy)
- http://www.clustergrid.niif.hu



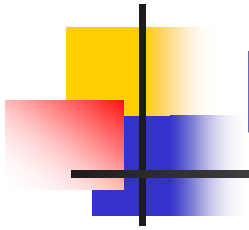
EGEE

- Participation in phases I and II – MGKK members
- NA1-5, SA1
- EGEE’07 in Budapest



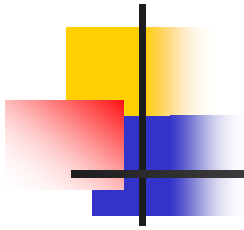
LCG

- LHC VOs supported by ELTE, NIIF, RMKI
- RMKI – Research Institute for Particle and Nuclear Physics, Budapest
  - 7th member in LCG (June 2003)
  - 50 CPUs, 1.5 TB disk
  - Participation in solving early LCG deployment problems
  - Some were even dreaming about becoming a T1
  - Reality: T2 MOU is not signed yet



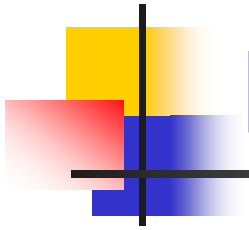
KFKI RMKI

- LCG site name: Budapest
- 110 CPUs + 6.5 TB (DPM), gLite 3.02
- All LHC VOs + a few others are supported
- 2/3 CMS, 1/3 Alice site on the longer run
- Alice participation just beginning



CMS participation

- Small but active T2 center
  - SC4 and CSA06
  - Monte Carlo production
  - PheDex transfers
  - Running robot jobs
  - http://www.lcg.kfki.hu/?lcg&lcgwelcome



Next steps

- Get more people involved, especially students
- Add sites at T3 level
- Increase CPU and disk capacities at the T2s
- Sign the T2 MOU with LCG
- Have a real NGI
- Participate in Alice and CMS as a small, but fully operational T2