



**PDC Center for  
High Performance Computing**

# Welcome from the Local Organizers

Erwin Laure  
Director PDC-HPC



# PDC & UPPMAX



**PDC Center for  
High Performance Computing**



- Two of the six HPC centers within the Swedish National Infrastructure for Computing (SNIC)
- PDC founded in 1990, Uppmax in 2003



UPPSALA  
UNIVERSITET

# UPPMAX latest procurements

## Compute clusters



- **Kalkyl**, Intel Xeon E5520, 2784 cores, IB,  
> 20 Tflops

Delivered in October 2009

- **SweGrid: Grad**, Intel E5430, 512 cores

Delivered in 2008

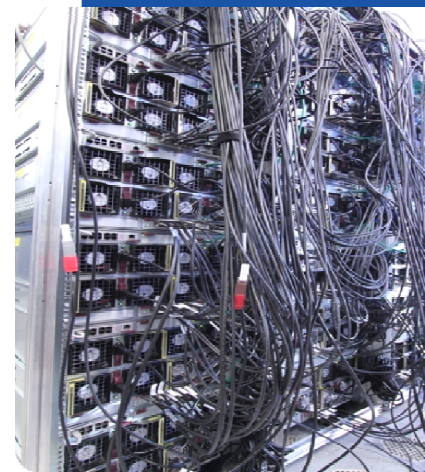
## Data storage

- Panasas parallel storage system, 660 TB

Delivered in August 2009

# PDC Main Resources

- Ekman
  - 1268 AMD Shanghai nodes (10,144 cores), full bisection IB, 90 TF
- Ferlin
  - 672 Intel Harpertown nodes (5,376 cores), Ethernet, 58 TF
- SweGrid
  - 93 Intel Harpertown nodes (744 cores), Ethernet, 8 TF
- Povel
  - Prace prototype
  - 180 AMD Istanbul nodes (4,320 cores), full bisection IB, 36 TF
- Cray XT6m (as of 07/10)
  - 464 AMD Magny Cours nodes (11,136 cores), SeaStar2, 93 TF
- Storage
  - Lustre, AFS, and IBM Tape system (3PB)



# Major Projects



NEON



PDC Center for  
High Performance Computing



Windows HPC Server 2008



SeRC

ScalaLife

# SNIC

- The Swedish Computing Meta-Center, organized within the Swedish Research Council
- Mission:
  - Provide computing (HPC, grid) and storage resources for Swedish research. Resources at the six SNIC centers
  - Coordinate investments and competence
  - Allocate resources to users (SNAC committee)
  - Fund and coordinate development projects
  - Be the national point of contact (NGI, ...) for large-scale international collaborations



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# SNIC 2010

- HPC2N (Umeå)
- UPPMAX (Uppsala)
- PDC (Stockholm)
- NSC (Linköping)
- C3SE (Göteborg)
- LUNARC (Lund)



+ OptoSUNET, 10 Gbit



PDC Center for  
High Performance Computing

- About 400 user groups (1-50 researchers each)
- SNIC budget 2010: 98 MSEK (10 MEUR)
  - Coordinates additional funding (LHCK, Foundations, ...)
- Hardware:
  - A few large-scale computing systems
  - Foundation-level computer systems and storage at all centers
  - SweGrid initiated 2003
  - SweStore initiated 2009

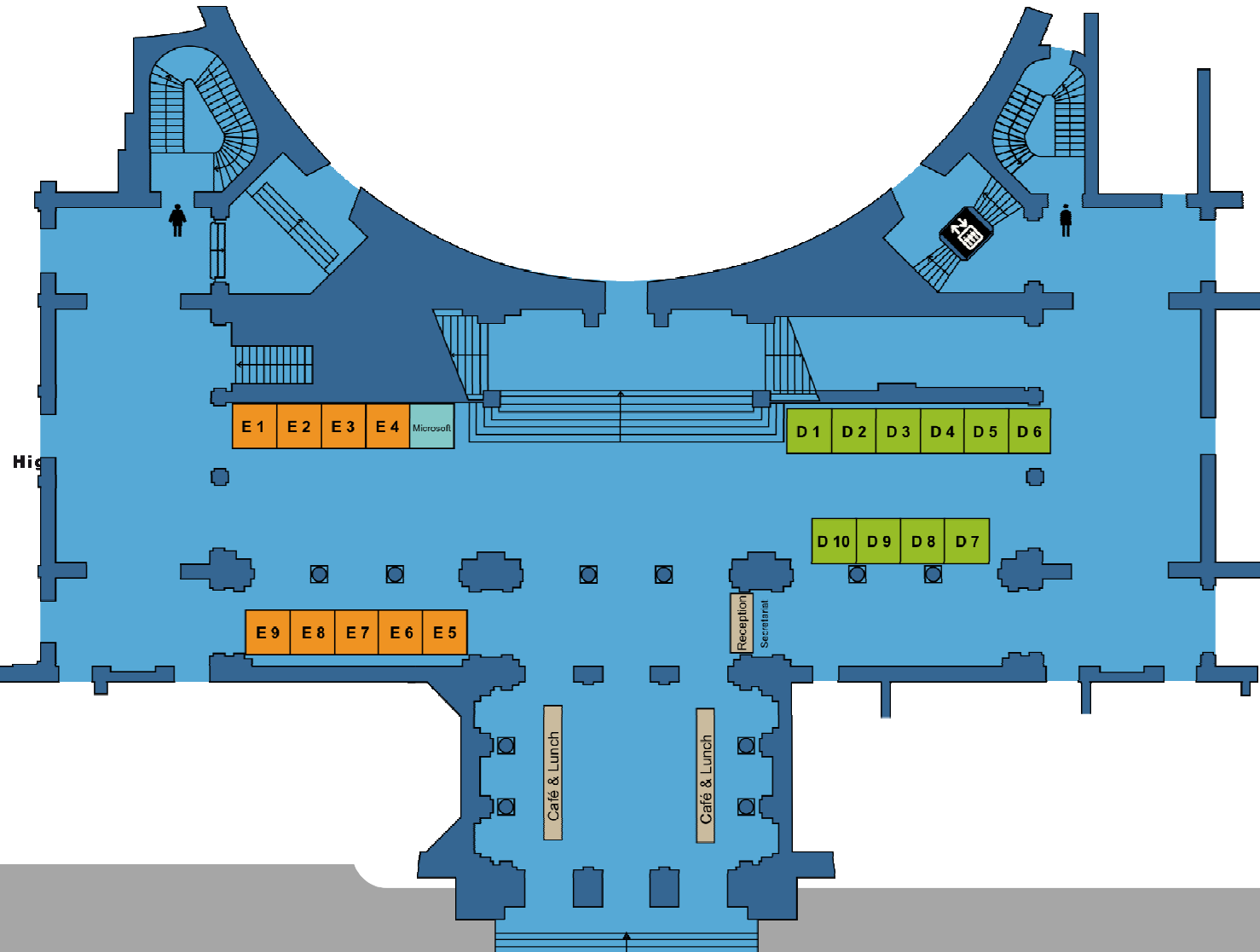


# Logistic Information

**PDC Center for  
High Performance Computing**



# Lunch and Coffee Breaks



Coffee will be serviced up- and downstairs; lunch only in the foyer

A separate vegetarian serving station is available

Permanent coffee serving station

Cafeteria downstairs

# Wireless

- Usage of eduroam is preferred
- If not possible use the login information contained in your registration pack
  - SSID: UpUnet-S
  - Login page: <https://netlogon.student.uu.se>
  - Use user group “Guest Identity”



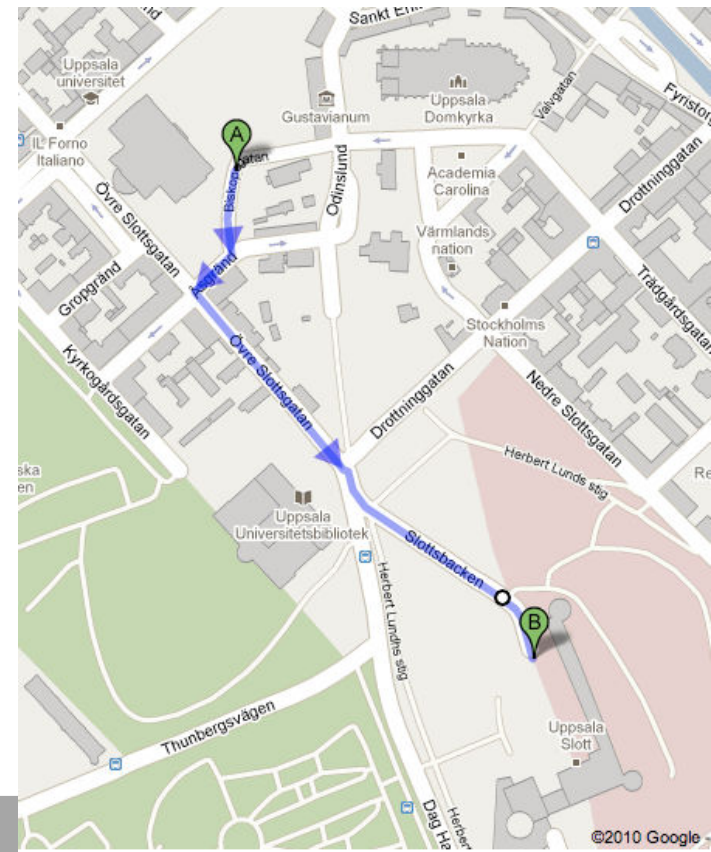
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# Receptions and Dinner



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- Drink vouchers included in your registration pack
  - Additional drinks available using the cloud model (pay-per-use)
- Don't forget your ticket for the dinner on Tuesday
- Dinner place is 10 minutes walk from University building
- No organized transport
  - If you need transport, please contact the registration desk



# Other Information



**PDC Center for  
High Performance Computing**

- Please wear your badge all the time
- Building is open to other visitors as well
  - Don't leave things unattended
- Smoking is not allowed inside the building
- Restrooms are downstairs
- In case of fire meet outside the big stairs
- Best demo/poster ballot box at reception
- Book of abstract available at  
<http://indicoprev.cern.ch/results/IndicoDr8H-1.zip>

And finally (not that you will have time now but maybe after the User Forum ...)

- Stroll around Uppsala
- Visit the Linnaeus garden
- Visit the Cathedral and the anatomic theatre in the Gustavianum (down across the park in front of the cathedral)



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# Thanks to our Sponsors and Supporters



**PDC Center for  
High Performance Computing**

- Main Sponsor
- Reception support
- Gala Dinner

**Microsoft®**

