

# D0 Operations

Linda Stutte

D0 Experiment Dept.

September 25, 2006

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# The Collaboration

**The DØ Collaboration**

AZ U. of Arizona  
 CA U. of California, Eerkeley  
 U. of California, Riverside  
 Cal. State U., Fresno  
 Lawrence Berkeley Nat. Lab.  
 FL Florida State U.  
 IL Fermilab  
 U. of Illinois, Chicago  
 Northern Illinois U.  
 Northwestern U.  
 IN Indiana U.  
 U. of Notre Dame  
 Purdue U. Calumet  
 IA Iowa State U.  
 KS U. of Kansas  
 Kansas State U.  
 LA Louisiana Tech U.  
 MD U. of Maryland  
 MA Boston U.  
 Northeastern U.  
 MI U. of Michigan  
 Michigan State U.  
 ME U. of Mississippi  
 NE U. of Nebraska  
 NJ Princeton U.  
 NY Columbia U.  
 U. of Rochester  
 SUNY, Buffalo  
 SUNY, Stony Brook  
 Brookhaven Nat. Lab.  
 OK Langston U.  
 U. of Oklahoma  
 Oklahoma State U.  
 RI Brown U.  
 TX Southern Methodist U.  
 U. of Texas at Arlington  
 Rice U.  
 VA U. of Virginia  
 WA U. of Washington

U. de Buenos Aires

LAFEX, CBPF, Fio de Janeiro  
 State U. do Rio de Janeiro  
 State U. Paulista, São Paulo

U. of Alberta  
 McGill U.  
 Simon Fraser J.  
 York U.

U. of Science and Technology  
 of China, -feifei

U. de los Andes, Bogotá

Charles U., Prague  
 Czech Tech. U., Prague  
 Academy of Sciences, Prague

LPC, Clermont-Ferrand  
 ISN, IN2P3, Grenoble  
 CFFM, IN2P3, Marseille  
 LAL, IN2P3, Orsay  
 LPNHE, N2P3 Paris  
 DAPNIA/SPP, CEA, Saclay  
 IReS, Strasbourg  
 IPN, IN2P3, Villeurbanne

U. San Francisco de Quito

U. of Aachen  
 Bonn U.  
 U. of Freiburg  
 U. of Mainz  
 Ludwig-Maximilians U., Munich  
 U. of Wuppertal

Panjab U. Chandigarh  
 Delhi U., Delhi  
 Tata Institute, Mumbai

University College, Dublin

KDL, Korea U., Seoul  
 Sungkyunkwan U., Suwon

CINVESTAV, Mexico City

FOM-NIKHEF, Amsterdam  
 U. of Amsterdam / NIKHEF  
 U. of Nijmegen / NIKHEF

JINR, Dubna  
 ITEP, Moscow  
 Moscow State U.  
 IHEP, Prolvino  
 PNPI, St. Petersburg

Lund U.  
 RIT, Stockholm  
 Stockholm U.  
 Uppsala U.

Fi of the U. of Zurich

Lancaster U.  
 Imperial College, London  
 U. of Manchester

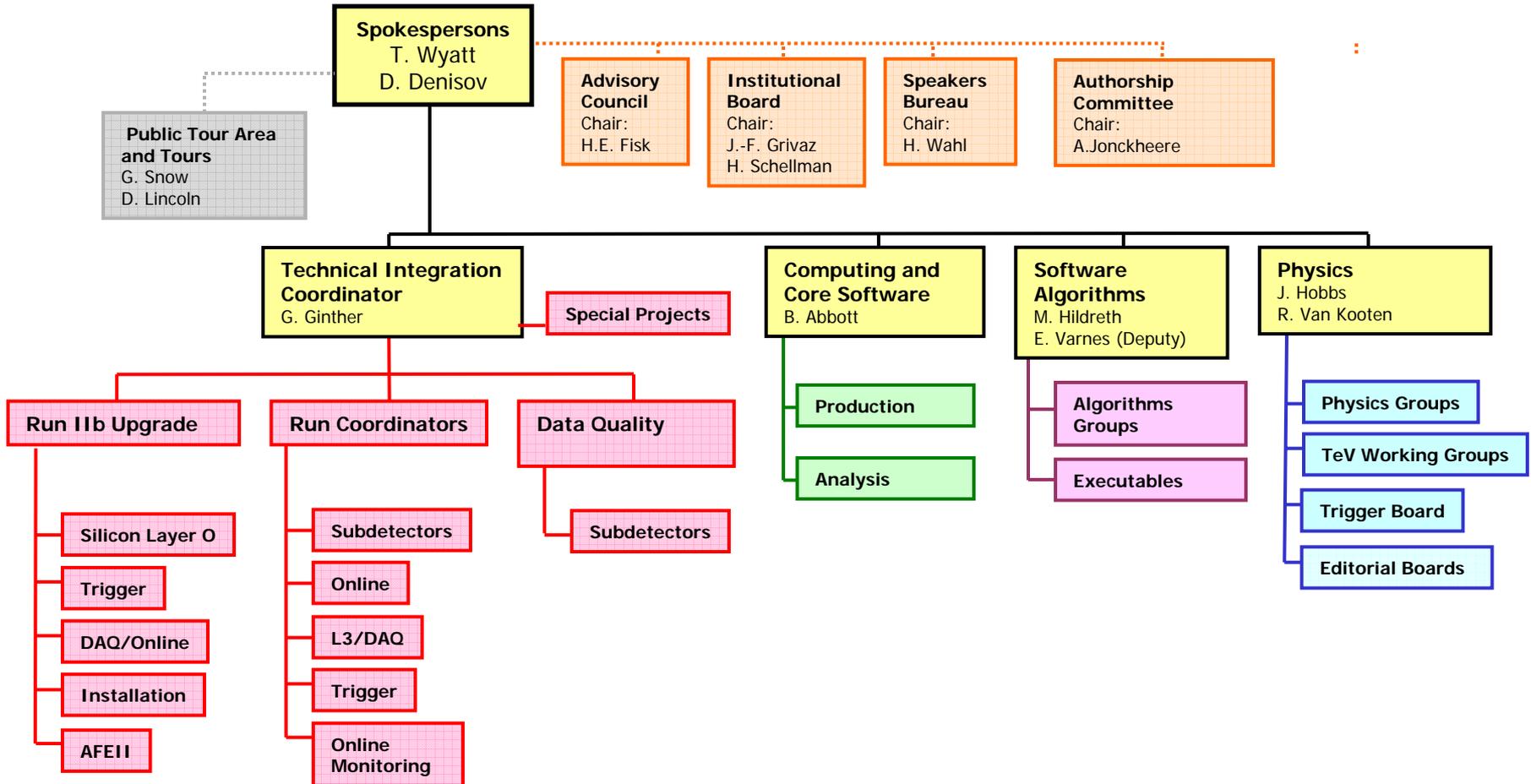
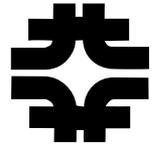
HCIP, Hochiminh City

Ann Hanson, UC Riverside

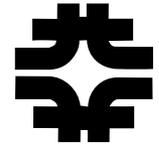
468 Members

87 Institutions

# Experiment Organization

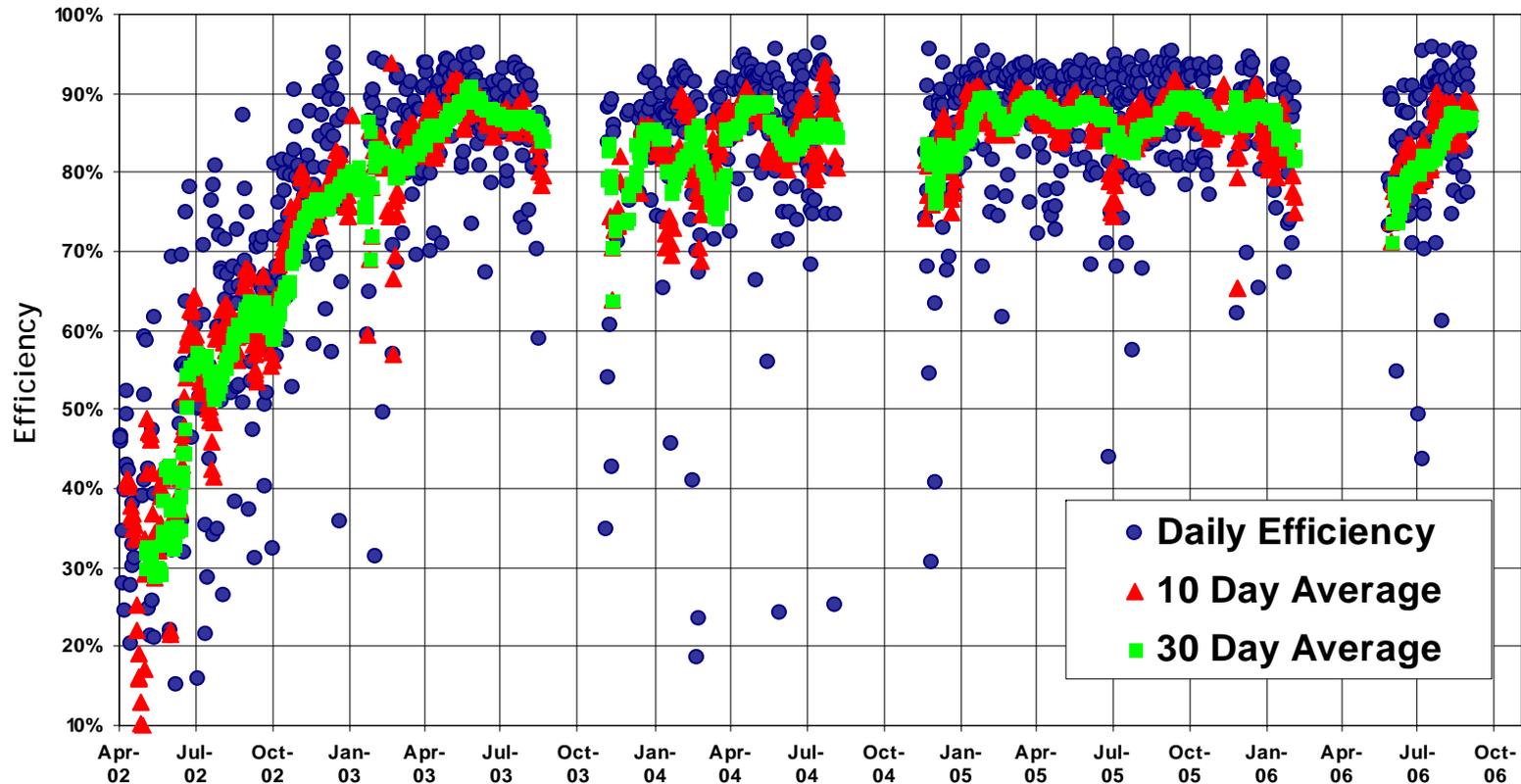


# Daily Data Taking Efficiency

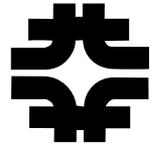


Daily Data Taking Efficiency

19 April 2002 - 20 September 2006



# The Collaboration



**17 shifters/day**

**CAP**

**DAQ**

**CFT**

**SMT**

**CALMUO**

**Offline**

**~100 experts on  
pages 24/7**

# D0 Experiment Department



## DZERO Experiment Department

L. Stutte, Head  
(H. Fisk, Deputy Department Head)  
R. Lipton, Deputy Department Head  
D. Denisov, Associate Head - Detector  
H. Greenlee, Associate Head - Computing  
G. Gutierrez, Associate Head - Physics Support  
B. Klima, Associate Head - Physics Support  
(W. Merritt)  
J. Womersley, L

## RUN IIb PROJECT

V. O'Dell, Run IIb Project Manager  
(R. Lipton, Deputy Project Manager)  
(T. J. Sarlina, Assistant Project Manager)  
(D. Knapp, Budget)

### ADMIN. SUPPORT

(S. Wright, Ldr.)  
(H. Bruch)  
(C. Johnson)

### PHYSICS SUPPORT

(G. Gutierrez, Co-Ldr.)  
(B. Klima, Co-Ldr.)  
S. Desai, RA  
W. Fisher, LF  
S. Fu, RA  
A. Juste  
M. Verzocchi, WF  
M. Wang, RA  
M. Weber, RA  
M. Wobisch, RA

### COMPUTING

(H. Greenlee, Ldr.)  
A. Jonckheere  
(S. Fuess)

### DESKTOP SUPPORT

G. Cisko, Ldr.  
R. Cantal  
E. Podschweit

### ONLINE

F. Bartlett, Ldr.  
N. Oshima  
G. Savage  
V. Sirotenko  
T. Yasuda

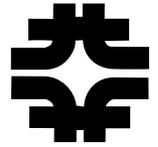
### DETECTOR

(D. Denisov, Co-Ldr.)  
(R. Lipton, Co-Ldr.)  
R. Angstadt  
(A. Bross)  
S. Cihangir  
W. Cooper  
T. Diehl  
S. Gruenendahl  
K. Hanagaki  
A. Ito  
P.A. Kasper  
D. Lincoln

### GUEST SCIENTIST

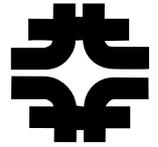
B. Lee  
H. Mao

# Electrical Support



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- 9 Electrical Engineers/Engineering Physicists
    - 3.6 FTE for Operations, Run IIb
      - Electronics, power supplies, management
      - Silicon Layer 0, CFT readout boards (AFEII)
  - 12 Electrical Techs (4 monthly, 8 weekly)
    - 5.75 FTE for Operations, Run IIb
      - Power supplies
      - Protection systems, Air and water control
      - AC power, Construction Coordinator
      - AFEII boards

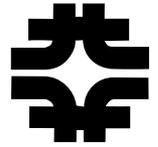
# Mechanical Support



- **2 Mechanical Engineers**
  - Cryo systems for solenoid, calorimeter, CFT
  - Silicon cooling system
  - Gas systems for Muon tracking systems
- **1 Operations Specialist**
  - Supervises all technicians, operations shifters
- **2 Technical Specialists**
  - Building manager; Gas systems, fabrications
- **8 Technicians**
  - 4 on shifts
  - Aid for building manager, vacation coverage
  - 2 Loaned out to other PPD, short term projects

# Need for Continued Support

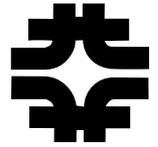
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- **Steady State Running - Obvious**
  - Power supply, electronics support
  - Mechanical support for cryo, cooling and gas
  - Aging infrastructure
- **Continued Shift Coverage - Essential**
  - Risk abatement
  - Increased efficiency \*\*
- **Upgrade commissioning – Continued help needed**
  - Silicon Layer 0, Trigger and DAQ
  - AFEII still to be installed
- **Discussed weekly with the PPD Division Office**

# D0 Summary

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- We couldn't continue to do our job without you available to do yours!
  - Superb engineering and technician support provided by Electrical and Mechanical departments
- Right now - Running well with limited resources
  - Continued vigilance required