

**FREE ELECTRON LASER WORKSHOP
and
NHMFL USERS' COMMITTEE MEETING
Thursday, October 27 through Saturday, October 29, 2005
University of Florida, Gainesville**

Thursday, October 27 **Workshop on Free Electron Laser**
New Physics Building Room 2205, 8:00 a.m. to 5:00 p.m.

FEL Workshop Agenda is [Appendix III](#)

5:30 p.m. Dinner at the Hampton Inn (Second Floor Conference Room)

7:30-8:30 p.m. Discussion on FEL and TeraHertz Parameters (2nd Floor Conference Room)

Friday, October 28 **USERS' COMMITTEE MEETING**
New Physics Building, Room 2205

7:00 AM Breakfast at the hotel (Hampton Inn)

7:45 AM Meet in the hotel lobby for transportation to the meeting site via [NHMFL@TLH](#) van, UF Physics vans, UF faculty cars and maybe Users' Committee members' rented cars.

8:00 AM **Closed door session. Users' Committee with Greg Boebinger, Brian Fairhurst Alex Lacerda, Kirby Kemper, and Neil Sullivan**

Plenary Overview Session – Open to all

8:30 AM NHMFL Overview G. Boebinger (20 min.)

9:10 AM Overview of Magnet Science & Technology Future J. Miller (20 min.)

9:50 AM Context for Renewal Proposal G. Boebinger (20 min)

10:45 AM **NMR group departs** for parallel sessions via NHMFL@TLH and UF Physics Dept. vans

11:00 AM **PARALLEL SESSIONS (See Agendas in Appendix I and II)**

NMR Users Advisory Committee at AMRIS – Agenda is [Appendix I](#)

DC/Pulsed Users Advisory Committee in New Physics Building Room 2205 – Agenda is [Appendix II](#)

EMR Users Advisory Committee meets informally with Tallahassee and Gainesville EMR faculty and staff in the New Physics building, Room 2260

ICR Users Advisory Committee met elsewhere at another time. Representative will report to entire group Saturday

4:00 PM **Tour of the High B/T Facility by the DC/Pulse Users Advisory Committee**

4:45 PM **Tour of AMRIS by the DC/Pulse Users Advisory Committee**

5:30 PM **Dinner at hotel, 2nd Floor Conf. Room - NHMFL Users' Committee and invited NHMFL staff**

6:30 PM 2nd Floor Conf. Room Open administrative meeting – Discussion of how the Users’ Committee, and the DC/Pulse, NMR, EMR, and ICR Users Advisory Committees will operate. Revision of the informal by-laws of the Users’ Committee to reflect our presently preferred method of operating.

7:30 PM Executive session: Elect new Chair and Secretary and discuss issues to be addressed during the Saturday meeting.

Saturday, October 29, 2005

7:00 AM Breakfast at the hotel

7:45 AM Meet in the hotel lobby for transportation to the meeting site via NHMFL@TLH van, UF Physics vans, UF faculty cars and maybe Users’ Committee members’ rented cars.

8:00 AM Plenary session of entire Users’ Committee in New Physics Building, Rm 2205

Informal report by DC/Pulse Users Advisory Committee about their breakout session

8:20 AM Informal report by NMR Users Advisory Committee about their breakout session

8:40 AM Informal report by EMR Users Advisory Committee about their breakout session

9:00 AM Informal report by ICR representative of most recent meeting of ICR Users Advisory Committee meeting

9:20 AM FEL Workshop informal report

9:40 AM Break

10:00 AM General Discussion of Priorities Greg Boebinger

12:00 PM Lunch in the atrium

1:00 PM Executive session or sessions to plan, outline, and begin drafting report

3:30 PM END

Appendix I

NMR Users Advisory Committee Meeting

Friday, October 28, 2005
University of Florida, Gainesville

- 11:00 NMR Spectroscopy and Imaging Program Overview including AMRIS**
(Rafael Bruschweiler and Art Edison)
- 11:30 NMR Science and User Report - Tallahassee**
Riqiang Fu: user proposals and accomplishments, research on UWB 900,
first 900 publications, in-house research
Fengli Zhang: liquid-state users and projects, liquid-state protein NMR
on UWB 900, comparison with Prestegard's 900
Zhehong Gan: solid-state NMR, acquisition of WB 600, powered magnets
Petr Gor'kov: NMR technology developments, including low E-probe activities
and plans
- 12:30 Lunch**
- 1:15 NMR & MRI Science and User Report – AMRIS**
including HTS probe and 900 imaging development (speakers ???)
- 2:15 30 T Proposal Development – (Denis Markiewicz)**
- 2:40 NHMFL Renewal Proposal Vision – (Rafael Bruschweiler and Art Edison)**
- 3:10 User Program Critique & Priorities**
Magnet Development and Funding Strategies
RF Technology Priorities
NHMFL Renewal Priorities
- 3:45 Break**
- 4:00 Prepare Summary Report to share with other sub-committees**
- 4:45 Close Sub-Group Meeting**

Appendix II

Pulse and DC Users Advisory Committee Break-Out Session Friday, October 28, 2005

University of Florida, Gainesville Room 2205 of New Physics Building

11:00 AM	Comprehensive View of the DC, Pulse, and High B/T Facilities (includes usage data by magnet and technique)	
	Introduction	A. Lacerda (5 min.)
20 min	High B/T and Microkelvin Laboratory	Y. Takano (15 min.)
20 min	DC High Field Facility in Tallahassee	B. Brandt (15 min.)
20 min	Pulse High Field Facility in Los Alamos	C. Mielke (15 min.)
~12:00 PM	Lunch in the atrium	
1:00 PM	Magnet Plans – upgrades and new magnets	
	Resistive magnets	M. Bird (15 min.)
	Pulse magnets	C. Swenson (15 min.)
2:00 PM	Break	
2:15 PM	Reports on user feedback and plans for the future	
15 min	High B/T and Microkelvin Laboratory	Y. Takano (10 min.)
15 min	Pulse High Field Facility in Los Alamos	C. Mielke (10 min.)
30 min	DC High Field Facility in Tallahassee	S. Hannahs (15 min.)
3:15 PM	Users Advisory Committee Executive Session Prepare report of break-out session to share with other Sub-Committees	
4:00 PM	Tours	
45 min	Tour of the Microkelvin Laboratory	Y. Takano and J.S Xia
45 min	Tour of the AMRIS laboratories	A. Edison or other

Appendix III

Free Electron Laser Workshop Thursday, October 27, 2005 University of Florida, Gainesville New Physics Building, Room 2205

7:15 Breakfast at Hampton Inn

8:00 Transport to Physics Building

8:30 Welcome and introduction

G. Boebinger

8:35 Outline of the Conceptual Design & Engineering Grant Goals.

J. van Tol

8:45 Session 1 FEL facilities and technology

8:45 George Neil (Jefferson Lab)

9:10 Gerald Ramian (UCSB)

9:30 Todd Smith (Stanford FEL center)

9:55 N'guyen (LANL)

10:20 Lex van der Meer (FELIX – FOM institute, Netherlands)

10:45 - 11:00 Break

11:00 Session 2 FEL Science and applications I

11:00 Wendy Flavell (Univ Manchester, 4GLS project Daresbury)

11:25 Gwyn Williams (Jefferson Lab)

11:45 Dave Reitze (UF)

12:05 John Singleton (LANL)

12:30 – 13:30 Lunch

13:30 Session 3 FEL Science and applications II

13:30 Mark Sherwin (UCSB)

13:50 Dmitri Basov (UCSD)

14:10 Johan van Tol (NHMFL)

14:25 Steve Hill (UF)

14:45 Arzhang Ardavan (Oxford University)

15:00 Mike Davidson (NHMFL)

15:15 – 15:30 Coffee break

15:30 Session 4 FEL science and applications III

15:30 Larry Carr (Brookhaven)

15:50 Bruce Carlsten (LANL)

16:20 Jim Cao (NHMFL)

16:40 John Eyer (UF)

17:00 Nancy Greenbaum (FSU)

17:30 Dinner at the Hampton Inn

19:30-20:30 Discussion on FEL and TeraHerz Parameters