

# NANOGrav Fall Science Meeting

## Oberlin College, Oct 24–26, 2012

### Wednesday, Oct 24

#### Full-group session

- **8:30–8:35** Welcome / Intro / Announcements
- **8:35–10:05** Working group introductions
  - Timing
  - Data sharing
  - Searching
  - Outreach
  - Strategic planning
  - Noise budget
- **10:05–10:30** Coffee break
- **10:30–11:30** Working group introductions
  - Interstellar medium mitigation
  - Detection
  - Instrumentation
  - International engagement
- **11:30–11:45** Study abroad reports (Swiggum, Cardoso, Martinez)

#### 11:45–1:15 Lunch break



(... Wednesday, Oct 24, continued)

### Parallel sessions I

- **1:15–1:45** Bayesian inference for stochastic-background searches (Vallisneri)
- **1:45–3:45** Detection (Siemens)

### Parallel sessions II

- **1:15–2:45** Interstellar medium mitigation (Stinebring)
- **5:00–6:00** Strategic planning (Cordes)

### Parallel sessions III

- **1:45–3:45** Timing & Data sharing (Ferdman)

### Student sessions

- **1:15–1:45** Unscheduled (attend Vallisneri talk)
- **1:45–2:45** Student “meet-and-greet” (Chamberlin)
- **2:45–3:45** Study abroad discussion (Lommen)

### Special events

- **3:45–5:00** Art museum tour (Stinebring)

## Thursday, Oct 25

### Full-group session

- **9:00–10:00** Discussion: Strategic planning and portfolio review (Cordes, McLaughlin)
- **10:00–10:30** GW burst detection with NANOGrav data (Madison)
- **10:30–11:00** Coffee break
- **11:00–11:30** Results from cyclic spectroscopy simulations (Palliyaguru)
- **11:30–12:30** Science discussion: Optimizing observing schedules (Lommen)

### 12:30–2:00 Lunch break

### Parallel sessions I

- **2:00–3:00** Outreach (Lynch)
- **3:00–5:00** Detection (Siemens)

### Parallel sessions II

- **2:00–4:00** Timing (Demorest)
- **4:00–5:00** Interstellar medium mitigation (Stinebring)

### Student sessions

- **2:00–3:00** Unscheduled (attend Outreach session)
- **3:00–4:00** Student-nominated discussion (TBD)
- **4:00–5:00** PSC high school visit (McLaughlin)

### Special events

- **6:00–??** Conference dinner



## Friday, Oct 26

### Full-group session

- **9:00–10:00** Discussion: Public and professional outreach (Lynch, Dolch)
- **10:00–10:30** Wideband timing and pulse portraiture (Pennucci)
- **10:30–11:00** Coffee break
- **11:00–11:30** The imminent detection of GW from MBH binaries with PTAs (McWilliams)
- **11:30–12:30** Science discussion: Dispersion measure variations (Demorest)

### 12:30–2:00 Lunch break

### Parallel sessions I

- **2:00–4:00** Instrumentation (Ransom)
- **4:00–5:00** Website (McLaughlin)

### Parallel sessions II

- **2:00–4:00** Interstellar medium mitigation (Stinebring)
- **4:00–5:00** International engagement (Lommen)

### Student sessions

- **2:00–3:00** Writing NANOGrav applications (Siemens)
- **3:00–5:00** Student-nominated discussions (TBD)



# Working Group Agendas

## Data Sharing

- **Weds, 1:45–3:45** (with Timing)

## Detection

- **Weds, 1:45–3:45**
  - Burst pipeline (Brian, 30m)
  - Stochastic pipeline (Sydney, 30m)
  - CW pipeline (Justin, 30m)
  - Noise analysis (Yan, 30m)
- **Thurs, 3:00–5:00**
  - Status of the noise paper (Delphine, 10m)
  - Characteristic strain vs. time: Getting all pipelines to agree (Xavi, 30m)
  - Discussion: Intro to the astrophysics of low-frequency GWs (Andrea, 30m)

## Instrumentation

- **Fri, 2:00–4:00**
  - Status of future wide-band instrumentation
  - YUPPI

## International Engagement

- **Fri, 4:00–5:00**
  - Compare progress with milestones
  - Discussion: How to get more people involved?

## Interstellar Medium Mitigation

- **Weds, 1:15–2:45**
  - Cyclic spectroscopy theory and simulation
  - Cyclic spectroscopy applied to real data
- **Thurs, 4:00–5:00**
  - Planning future observations
- **Fri, 2:00–4:00**
  - Dispersion measure methodology
  - Non- $1/\nu^2$  timing effects

## Noise Budget

- No meetings scheduled.

## Outreach

- **Thurs, 2:00–3:00**
  - Run-through of “standard” public NANOGrav talk

## Searching

- No meetings scheduled.

## Strategic Planning

- **Weds, 5:00–6:00**
  - Discussion of “Figure 1” from PR response

## Timing

- **Weds, 1:45–3:45** (with Data Sharing)
  - (See Data Sharing agenda)
- **Thurs, 2:00–4:00**
  - Polarization calibration
  - Status of “historical” data sets
  - Wideband timing

## Website

- **Fri, 4:00–5:00**
  - Discuss content organization
  - Outreach materials

