Dawn IV: Objectives

David Shoemaker

LIGO-G1801630-v2

Agenda: This morning

- Session 1: 09:00 12:00 Chair: Reitze
- Intro/Objectives for this particular Dawn meeting (10+10):
 Shoemaker
- Progress on action items in the Dawn III report (25+5): Mclver/Cadonati
- Time constraints and opportunities in Europe, US, Australia, Asia (10+10+10+10; each 8+2): Reitze/Katsanevas//McClelland/Somiya
- Coffee break 10:30 11:00
- Discussion on the evolving role of Dawn meetings (45): Moderator: Berger

Agenda: this afternoon

- Session 2: 13:30 18:00 Chair: van den Brand
- 3G science case (25+20): Sathya
- Basic concepts for 3rd generation detectors (25+20): Barsotti
- R&D challenges and global progress (25+20): Punturo
- Coffee break 15:45 16:15
- The APPEC roadmap APPEC chairman, Antonio Masiero (30+15)
- Audience Discussion: What is the path forward for science on this scale? (60) Moderator: **van den Brand**

Agenda: Friday morning

- Session 3: 09:00 12:30 Chair: Cadonati
- Astrophysics -- 3G network performance metrics -- (20+10): Evan Hall
- Trade of science gained at low frequencies vs. Observatory requirements (20+10): **Stefan Hild and Stefan Ballmer**
- Ideas for determining the roadmap between Adv+/A+ and 3G: McClelland (20+10)
- Coffee break 10:30 11:00
- Coatings -- roadmap to readiness (20+10) Fejer
- Computing requirements (20+10): Porter

Agenda: Friday afternoon

- Session 4: 14:00 17:30 Chair: Lueck
- Community outreach and engagement (20+10): Nissanke
- Communication with and between funding agencies (20+20): Rowan
- Coffee break 15:30-16:00
- Discussion: summary of sessions (45): 4 Chairs
- Identification of action items, assignment, time scales (30): Moderator: Shoemaker/Mclver
- Last words (15): Shoemaker

State of 3G

- ET is the trailblazer with history almost a decade deep
- US efforts in domain were minimal until aLIGO was finished
- GWIC formed a task force in late 2016 to try to help structure and drive a community-wide and global effort in 3G
 - Significant effort in the Science Case, Coordination of R&D, and Governance
- ET intends to join the ESFRI roadmap
- 3G in the US has received study funding; GWs will appear in the 2020 Decadal Review in some form
- The coming year is important for 'catching waves' in funding and community interest

My goals for Dawn IV

- Facilitate discussions on a global rather than US-Centric scale for the path to 3G
- Work toward a unified very informal single umbrella organization for 3G
 - Don't need much more than agreement on the idea and a name for now

My goals for Dawn IV

- Inform and learn from funding agencies from US and Europe
 - Some representatives present esp. this afternoon
 - Have made an effort to make afternoon presentations that speak to that audience, communicate the state of the art
 - Also serves to get us all on the same page
 - Hope we get some guidance on how we can best navigate the path to funding for projects of this scale
- Develop a plan to create roadmap for 2.5 \rightarrow 3G Epoch
- Develop a plan to create an Advocacy plan (talks, roadmaps, etc.)
- GWIC 3G committee 'delivers' on initial goals by ~Dec 2018. Get ideas for "What's next"