

CHIPP/CHAPS join meeting on Gravitational Waves

Wednesday 1 December 2021 17h00

Indico: <https://indico.cern.ch/event/1102744>

**Participants:**

Rainer Wallny, Philippe Jetzer, Adrian Bilan, Georges Meynet  
Steven Schramm, Michele Maggiore, Anna Sfyrla, Tobias Golling, Federico Sanchez,  
Alexandre Refregier

[ET](#) = Einstein Telescope

[LISA](#) = Laser Interferometer Space Antenna

[SKA](#) = Square Kilometer Array

[ESFRI](#) = European Strategy Forum on Research Infrastructures, is a strategic instrument to develop the scientific integration of Europe and to strengthen its international outreach.

INFRA-\* = Research infrastructure concept development ([INFRA-DEV](#))

Rainer Wallny starts the meeting thanking everybody for being present for this kick-off meeting on common CHIPP CHAPS interest on Gravitational Waves.

- **UniGe** has been primarily active on Einstein Telescope (hereafter ET) related activities in the past months, especially following the ESFRI approval of ET
  - Cross-department effort (astronomy, particle physics, theoretical physics), hope to form a "Center for Gravitational-Wave Science" (pending request)
  - Currently involved in the Observational Science Board and e-Infrastructure Board activities
  - Also participating in two funding proposals related to ET, INFRA-DEV and INFRA-TECH (more details below)
  - No short-term plans to hire any new people on GW topics, hope is that merging a fraction of time from several PIs in the Center for GW Science will still allow us to play a key role in this area
  
- **UZH** has been primarily active on LISA related activities (beyond ongoing LIGO/VIRGO participation)
  - Working to hire a new professor, either associate or full, in the next couple of years
  - This position will be aimed strongly at LISA data analysis (not hardware), focusing on interpreting and analyzing the LISA data
  - As LISA will not be taking data for a bit, the person would have time to also work on other GW areas in the interim (such as LIGO/VIRGO, or ET) depending on the interest of the selected candidate
  - Not going to be hired on time for the INFRA-DEV or INFRA-TECH proposals, but want to find a way to participate in the interim
  
- **ETHZ** has a professor position for GW science in professor planning, but is currently waiting for the funds to become available
  - Expect to hire someone in ~2 years due to fund constraints right now (COVID-related delays)
  - Position would be on either ground-based or space-based GW science, depending on the ideal candidate's preferences
  - Good if can work with LISA activities within the group, but not a strict requirement
  
- **INFRA-DEV** funding proposal, deadline of 20 January 2022
  - Primarily aimed at legal/structure aspects of forming the ET observatory
  - Aiming at roughly 3M euro, over four years
  - 11 countries participating, with one institute per country representing the country (UniGe)

currently representing Switzerland)

- Participation would be supported by SERI given current Swiss affiliation status on EU funding proposals, already spoke with EURResearch to confirm this
- Swiss effort currently being led by Tassos (Anastasios Fragkos), who is participating especially in WP8: "Computing and Data Access", with emphasis on Task 2: "Computing and Data Model"
  
- **INFRA-TECH** funding proposal, deadline of 20 April 2022
  - Primarily aimed at advancing the technology needed for European research infrastructures
  - Aiming at roughly 10M euro, but the scope is evolving as came up in the meeting, may cover all of APPEC
  - Participation would be supported by SERI given current Swiss affiliation status on EU funding proposals, already understand that this is the case but need to confirm exact participation once the scope is fully defined
  - Swiss effort on the ET-related aspects currently being led by Steven, who in the original structure (subject to change) will participate in WP5: "efficient computing and algorithms"
  - This funding proposal is subject to change, as it is still rapidly evolving both in scope and content

**- Path forward**

- All agree that now is the time to get involved in ET if going to get involved, the next couple of years will fix exactly what ET can/will do and how Switzerland fits into that picture
- INFRA-DEV timeline is very short; interested parties should get in touch with Tassos (Anastasios Fragkos <[Anastasios.Fragkos@unige.ch](mailto:Anastasios.Fragkos@unige.ch)>) urgently, ideally by tomorrow (Friday Dec 3), to discuss how their participation in the activities should be stated. Believe that there is interest from both UZH and ETHZ to also have some low-FTE form of participation listed, to be discussed directly.
- INFRA-TECH timeline is longer, and the scope is not yet clear. Suggest to wait for the moment to better understand the form that this will take, and discuss again later how to represent Swiss GW interests within the context of this proposal.
- Philippe and Steven will make an effort to support the joint CHIPP/CHAPS working group on GW science for the moment. Please contact them both in case there is anything that should be discussed, or to organize future meetings as needed.

More details on the ET aspects can be found in Steven's slides, which are available here:

<https://indico.cern.ch/event/1102744/contributions/4639131/>

Best regards,

Philippe, Rainer, and Steven