ITAMP News

Center for Astrophysics | Harvard & Smithsonian

2022-2023

Beginning in Fall 2021, Harvard took steps for in-person small gatherings (and classes) on campus subject to weekly testing and the usual precautionary protocols. Nearly everyone at ITAMP, including postdocs, staff, and long-term visitors began to come to the office. The process was arduous- with accounts on Crimson Clear for daily attestations and Color accounts for weekly PCR tests; but well worth it. Interviews by short-listed candidates for the ITAMP fellowships were conducted on Zoom, including meetings with scientific and advisory boards, and the current postdocs.

In December 2021, we were given the go ahead, both at Harvard and at the Biosphere, to begin advertising for the 2022 Winter Graduate School on Rydberg interactions and the student registration page opened sometime in January 2022. The dates were set for February 27-March 5, 2022. Even with such short notice, the response from the community was overwhelming. Some 34 students were admitted to the school, with 13 students from the Cambridge area institutions and about a half came from Europe. All activities, including the lectures, daily meetings, tours of the Biosphere and of course the hike, were in person! As in the past, the lectures are on the ITAMP YouTube channel under the winter school playlist. The poster sessions sometimes ran into the wee hours of the night.

We are still not to the point to have full in-person workshops on campus, but our full expectations are that we will be able to in Fall 2022.

ITAMP is a new NSF Focus Research Hub in Theoretical Physics

It is with excitement and pride that we write that ITAMP was selected in 2021 to be the new NSF Focus Research Hub in Theoretical Physics. ITAMP will remain a research and user facility for the AMO physics community and will strive to address forefront and topical challenges in theoretical AMO physics in the United States.

Dalgarno Memorial Lectures

After a three-year hiatus, the Harvard endowed Dalgarno Memorial Lectures are back! The Lectures, which alternate between Physics and Astronomy Departments, this year were given by Prof. David Neufeld (Johns-Hopkins University). David is a well known expert on the chemistry of the interstellar medium, which Alex Dalgarno pioneered. David was instrumental in the detection of HeH^+ in the ISM, known for being the first molecule formed in the early Universe. David was at ITAMP from April 25-29 and delivered two pedagogical lectures and a colloquium. The 2023 Dalgarno Lecturer will be chosen from a recommended list on the AMO physics side.

Donate to *The Dalgarno* Memorial Lectures Endowment Fund

https://lweb.cfa.harvard.edu/itamp-lectures/dalgarno-memorial-lectures

Here and Coming Visiting Fellows

Bretislav Friedrich September 2021 - June 2022
Timur Tscherbul - Fall 2022
Tomasso Marci November 2021 - November 2022

Prizes and News

It's with great pleasure that we announce that Misha Lukin has been awarded the APS Ramsey Prize. Misha will deliver a plenary lecture at the 2022 DAMOP meeting in Orlando. Well deserved Misha.

Annabelle Bordt, a current ITAMP fellow, was selected as a finalist for the APS Debbie Jin Prize and will give an invited talk at the Thesis Prize session at DAMOP in Orlando. Excellent job Annabelle.

Nicole Yunger Halpern, former ITAMP fellow just published a new book for the general public about her research. The new book came out in March 2022 titled "Quantum Steampunk: The Physics of Yesterday's Tomorrow". Well done Nicole. Nicole is on an interview tour and recently spoke at the Harvard Book Store. Go buy her book!

2022 Postdoctoral Fellows

Francisco Machado

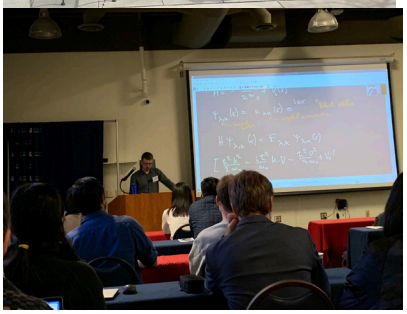
ITAMP Welcomes Francisco Machado (Berkeley) to ITAMP. Francisco performed his PhD reseach on out-of-equilibrium many body dynamics with AMO systems with Norman Yao and will arrive in Fall 2022.

ITAMP 2023 Postdoctoral Fellowship application will open in Fall 2022
https://pweb.cfa.harvard.edu/opportunities/fellowships-visiting-scientist-positions/itamp-postdoctoral-fellowship

To New and Better things

Valentin Walther

Valentin interviewed at a number of places and seriously considered several offers, before settling on Purdue as his next scientific home. Valentin will start in January 2023 as the newly minted professor of chemistry and optics at Purdue. Congratulations are due to Valentin.



Send Your Students to the ITAMP 2023 Winter School @ Biosphere!

The ITAMP Winter Graduate School will be held on the Biosphere Campus near Tucson, Arizona in late February, 2023.

Visit: https://lweb.cfa.harvard.edu/itamp-events/winterschool

Contact the ITAMP Coordinator **Jaclyn Donahue** for information and questions at jaclyn.donahue@cfa.harvard.edu

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