



**Post-Doctoral Fellow  
Harvard University  
Laboratory for Particle Physics and Cosmology**



The Laboratory for Particle Physics and Cosmology at Harvard University invites applications for a Post-Doctoral Fellowship to be associated with the ATLAS experiment. Applicants for this position should have a Ph.D. in experimental particle physics. Experience with state-of-the-art detector systems and with the analysis software of a particle physics experiment are required.

The successful applicant is expected to be stationed at CERN and work with Prof. Masahiro Morii, whose research interests include searches for physics beyond the Standard Model and the ATLAS ITk upgrade project for the High Luminosity LHC.

Applicants should send a curriculum vitae, a list of publications, and a statement of research interest, and arrange for three (3) letters of reference to be sent electronically to Prof. Morii ([morii@g.harvard.edu](mailto:morii@g.harvard.edu)), or by mail to:

Masahiro Morii  
Lyman Laboratory of Physics  
Harvard University  
17 Oxford Street  
Cambridge, MA 02138  
USA

Applications sent by November 30, 2021, will receive full consideration.

Harvard is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, sex, gender identity, sexual orientation, religion, creed, national origin, ancestry, age, protected veteran status, disability, genetic information, military service, pregnancy and pregnancy-related conditions, or other protected status.

## Frequently Asked Questions

Here are some questions I (Morii) have been asked, and my answers to them.

### When does the job start?

Funding for the position is available immediately. The appointment may be delayed if the successful candidate is not immediately available. I hope to fill the position as early as possible, but the quality of the candidate is more important than the timing of the appointment.

### How long is the postdoc appointment?

The appointment is initially 3 years, with a possible extension to the 4th year. Strictly speaking, the position is contingent on funding availability, and the contract is renewed year-by-year.

### Will I be at CERN or at Harvard?

This position is intended for a postdoc stationed at CERN.

### What kind of physics does Harvard do?

Harvard ATLAS group has recently been involved in Higgs ( $H \rightarrow b\bar{b}$ ,  $H \rightarrow \mu\mu$ , di-Higgs resonance), Standard Model (tri-boson, four-top,  $t\bar{t}W$ ), SUSY (stop, higgsino, long-lived particles, RPV gluino). I am currently involved in the four-top and  $t\bar{t}W$  measurements. My group has previously worked on SUSY and dark matter searches as well as Standard Model diboson measurements.

### Will I work on top physics, then?

You are welcome to. You are also welcome to pitch your own idea. I favor hiring candidate with her/his own ideas, and I expect you to be leading the analysis, both intellectually and organizationally. So, you'd better have a clear perspective of the physics you are getting into.

### What is Harvard's involvement in the ITk project?

I am working on the construction of the ITk Strip Barrel detector in collaboration with BNL, LBNL, and UC Santa Cruz. The successful candidate of this search is expected to take part in the project from CERN by (a) contributing to the development of the tracking software and (b) testing and integrating the US-built detector components ("staves") as they arrive at CERN.

**I am not an ATLAS member. Can I apply?**

Definitely. ATLAS rules require a new ATLAS member to devote 50% of his/her first year on a 'qualification task'. That's no different from what I consider appropriate for postdocs in our group, ATLAS-trained or otherwise.