



## Virtual Open House

### Faculty Specific Questions Submitted by Prospective Students

*These questions may not be asked but were sent in at the time of the virtual open house invitation.*

**Chris Monroe, Edo Waks, Steve Rolston:** Do you have any plan to recruit new graduate students this year?

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**Ronald Walsworth:** What's the current state of affairs regarding your lab's transition from Harvard to UMD? Would a first-year student be able to be an RA with you (I'm not totally sure who decides who is an RA/TA)? What can you tell me about QTC? How is the partnership between QTC and the department going to work? Will the labs be in the department building or elsewhere?

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**Maissam Barkeshli, Brian Swingle, Victor Galitski:** I am interested in their works, are they still hiring? How many graduate students are you planning to take in the next year? What are the prerequisites (in terms of physics and math background) that are expected of students who want to begin working with you?

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**Norbert Linke, Jacob Taylor:** (Feel free to answer as many or as little as you like) Are there open positions in your lab? If not, is there someone else in the field whom I should contact? What makes someone a good fit for your lab? In what specific directions do you plan to take your research in the near future? What is your long-term research goal? How many undergrads, grads, and postdocs are currently in your lab? What are your criteria for determining when someone is ready to graduate? How many years does it usually take for students to graduate from your lab, or how many years do you anticipate it will take? Where have recent lab alumni gone? How frequently do you expect to interact with grad students in-person and over email? Do you have particular procedures for determining authorship on papers? What courses do you recommend to go into this field? Do you have contacts outside of academia? Should an incoming student be prepared to TA beyond their second year? What do you consider to be excellent graduate student work? How many hours of work per week do you expect from a student? Do you plan on being on sabbatical leave over the next few years? If so, for how long? Is there funding for first year students this summer or do you welcome first year students to volunteer over the summer? Which conferences do you usually attend and is that list expected to change in the near future? When do you expect students to have made enough progress to attend conferences? In the near future, do you anticipate publishing in journals that are different from the journals of your current publications? How often are group meetings held? How are group meetings run? What are your thoughts on students taking courses beyond their second or third year? Do you expect incoming graduate students to come up with their own research idea? What advice would you give to a first-year student interested in working with you? For graduate students: How many courses do students take in the first and second year? How many courses do students take in semesters beyond the second year? For how many months in a typical year does it snow? How convenient is the public transportation system? Does public transportation

in the area pause during heavy snow? How much does rent cost in the area? How far in advance should I start looking for housing? Are there discounted dining plans for graduate students living off-campus? What are your go-to restaurants in the area? How safe is the neighborhood? How many hours do you spend on teaching and research each week? How do you study for the quals? What do you wish you knew before graduate school? What are your biggest sources of stress? When do students typically start presenting at conferences and publishing? What tools and resources do you find useful in managing your research project? Do apartments in the area usually come with laundry machines or do people usually go to laundromats? How helpful is the career counseling provided by the college? How accessible and helpful are the college health services? Are most lecturers helpful during office hours? What are the overall strengths of the department? What is your biggest complaint about the department? How difficult is it to join a lab? What should we do when professors do not respond to their emails? How many hours does your advisor expect you to work per week? What is the physics student community like? How helpful is your advisor in your job search process? How much work are you expected to put in for group meetings? Did your advisor propose a project for you to work on or did they want you to come up with one? Is the funding enough to live on, or are there moments that you worry you might not make rent on time? What are your career goals? How well do you think UMD Physics prepared you for your career goals?

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**Carter Hall, Kara Hoffman, Gregory Sullivan, Jordan Goodman, Eun-Suk Seo:** What are they currently working on? Are they looking for grad students?

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**Jacob Taylor, Alexey Gorshkov:** 1.) Are you taking new students? 2a.) If yes: How many are you looking to take? 2b.) If no: Could you kindly suggest me other professors. (If answer to 2a. is yes then) 3.) What is the procedure for joining the group? 4.) How does funding for your students normally work? 5.) Do new students work for/report to other grad students, post docs, or you directly? 6.) How often do you have group meetings? 7.) Would you suggest I take any specific classes? 8.) What makes someone a good fit for this group? 9.) Are there funds available for students to travel to professional conferences? 10.) Do you have specific topics in mind for a potential PhD student?

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**Jacob Taylor, Alexey Gorshkov, Edo Waks, Mohammad Hafezi, Thomas Murphy:** Will they be open for offering RAship in the next academic year?

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**Michelle Girvan:** 1. How many students are there in a group (including postdoc)? How many do the professor recruit per year? 2. What is the requirement for a student to get a Ph.D. (i.e. how many original projects and papers a student have to finish in order to start the dissertation?) 3. How many years on average can a student get his Ph.D. 4. What does a student usually do after he graduates? 5. Do professors have rigorous requirements on everyday attendance? 6. How often is the group meeting? 7. Is there any other group activity? 8. How often do the professor talk with one student? 9. How many days a week do the professors stay at office and students can talk to him/her freely? 10. What are the future projects the professor plans to do? 11. Can I choose other department's courses? 12. Can you tell me a little bit about the COMBINE program?

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**Raman Sundrum, Theodore Jacobson, Brian Swingle, Christopher Jarzynski:** 1. For an incoming M.S. theory student, is it possible to start as an RA, if one passes the qual prior to starting in the fall? 2. Do you have an opening for this coming fall, or within the next year? 3. Can you share in some detail one project you're currently thinking about/working on? 4. Is it possible to speak with a current grad student of yours?

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**Raman Sundrum, Anson Hook, Kaustubh Agashe:** I have completed a Masters in Quantum Fields and Fundamental Forces. I am very interested in continuing in this field of theoretical high energy physics. Could it be possible for the particle physics theory faculty to share information about possible vacancies in their groups? This would greatly help me get an idea about when I could expect to start working on a project.

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**Andrew Childs, Matthew Coudron, Brian Swingle, Jacob Taylor:** What are some current projects in your research group?

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**Adil Hassam, William Dorland, and Christopher Jarzynski:** What is the balance of computational vs. analytic work in your research? What projects are you working on now, and what do you think might work on next? Is there any work being carried out by others in Nonlinear Dynamics/Complex Systems/Plasma Physics, or another field, in Maryland that you find particularly interesting?

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**Brian Swingle, Alexey Gorshkov:** What are the physical and mathematical prerequisites for working in your group? What programming languages, numerical analysis or computer algebra software are used in your group?

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**Christopher Jarzynski, Michelle Girvan, Wolfgang Losert:** What is your advising style? How many students do you plan to take in the coming two years? What are the criteria when you choose PhD students? What is the portion of theoretical and computational work do students in your group usually do?

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**Edo Waks, James Williams:** How should I reach out to you to apply for working in your laboratory? What research are you going to conduct in the next few years? Which courses do you recommend to take before working in your laboratory? How do you operate your laboratory? What do you expect from your students?

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**Mohammad Hafezi:** Is there a PhD opening in your group? I am quite interested in your research direction. I have a background in theoretical fiber optics and also experimental physics. I wish to help develop novel photonic and quantum computation tools.

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**Alicia Kollár:** Is there a PhD opening in your group? I learnt that you use graph theory and multimode system to study quantum simulator. I have I have a background in theoretical fiber optics and also experimental physics. I believe that my skill toolkit can make a contribution.

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**Carter Hall:** What current research would a student in your group be doing? Is there any hardware development in your group in addition to data analysis from LZ?

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**Victor Galitski, Maissam Barkeshli, Sankar Das Sarma:** Are you looking to take new graduate students from the incoming cohort?

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**Alessandra Buonanno, Michelle Girvan, Christopher Jarzynski:** I wanted to hear about UMD's process for attaching graduate students with research groups. I was also hoping to learn more about what it's like to research with them and what direction they see their research moving in the next few years.

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**Trey Porto, Chris Monroe, Ian Spielman, Alicia Kollar:** What are possible projects that I can join? Where did recent alums of the lab go?