



THE UNIVERSITY *of* EDINBURGH

School of Physics and Astronomy

Transcript for “Dissertation Projects – MSc Programmes in TP & MP” video

MSc in Theoretical Physics (TP)

MSc in Mathematical Physics (MP)

Odi Soler Gibert: The part I am enjoying most, I think it's the dissertation itself because the courses are very interesting and you learn a lot with them. But of course the dissertation is something you do on your own, something you can do at your own pace and because of your interest. So, yes, the motivation is quite different.

Andrew Thornbury: Yes, so doing research on the MSc is obviously quite different than going just to classes and being taught the things. You have to learn so much stuff yourself. It's a big jump but they help you along with it, because obviously during the year we have to do our research proposals and do our presentation, so it prepares us quite well for eventually actually starting doing the research and all of that. So yes, it's good.

Emmy Gabriel: For me the dissertation is one of my most favourite parts about the course. I'm currently doing research with the LHCB group at CERN, and I actually get to go out there to talk about my research, to talk to the physicists there next week.

Odi Soler Gibert: My dissertation is about gravity and quantum physics. I won't go much into detail because it's a bit weird.

Andrew Thornbury: My project's on supersymmetry which is obviously very new, beyond the standard model physics so it's not been confirmed yet. So there's obviously a chance that it could be all complete like – completely wrong and completely awful. Or there could be a chance that they'll discover the LHC and it will be a very good project to work on. The most interesting part is that it is new physics, that it's on that forefront, that cutting edge that no one's really sure of what's going on. So it's kind of interesting to be part of that, and helping like crack that code I suppose, of what we're made of. While at first it kind of like seems maybe a bit daunting, if you do it in stages and it's broken down very well, and like my supervisor's been really helpful, setting me up, whenever I have a problem I can chat to her, if she doesn't know she'll send me onto someone

else who can help me out, and so yes, it's high energy physics but it's doable.

Ewen Gillies: Yes, from the result of my dissertation I felt that I had actually achieved some form of research that the physics community could use. Some real research, which is really what I'm interested in. I appreciate projects that are valuable for education purposes but really I'd like to be useful to the physics community at large. So, the fact that Edinburgh University gave me an opportunity to do so at Master's level is invaluable in my opinion.

Emmy Gabriel: My dissertation project right now, as I said, is doing data analysis for CERN. I feel very excited that such collaborations are possible and it has been a dream for me for many years to go to CERN. I'm very happy that this is an opportunity that the university and CERN together can actually give me.

Andrew Thornbury: There has been a couple of people who have proposed their own projects; one girl wanted to do a condensed matter physics project so she went into the people in the chemistry who are also working on condensed matter physics and asked them, and got her own course. Someone did ask a maths professor for a maths project and they're working away on that now. Some of the astronomy guys didn't like the choices that they had, so they asked could they do something else different within that, and they found someone to do it for them. There is always like the opportunity to go and ask. If your choices aren't being catered to they will like facilitate you in what you want to do.

Emmy Gabriel: The research I'm doing for CERN right now will actually lead to a publication in the end. Which I will not be involved with the whole project but I will definitely contribute to it which I think is very interesting and definitely a good opportunity being a Master's student.

Ewen Gillies: By contributing to the actual real world physics research at a Master's level I was very much prepared for my PhD and for further research, in that I understood the kind of, from start to finish, how a project should look and what you should aim to do to get your work published and to get people interested in your work. I think that this project really prepared me very well for my PhD, or even for any research environment in the future.

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