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To the selection committee for  
The summer school  
“Mathematical and conceptual aspects of quantum theory”  
in Morelia

### **Letter of recommendation for Anniela Melissa Rodríguez Zarate**

To whom it may concern,

it is a great pleasure to *recommend* my bachelor student **Anniela Melissa Rodríguez Zarate** for the summer school “Mathematical and conceptual aspects of quantum theory” in Morelia. Melissa is a very motivated, diligent, self-driven and hard working student who has started her bachelor thesis project under my supervision. I particularly value Melissa’s very precise style of work, i.e. she tries to understand everything from the physical motivation up to details of the mathematical mode by working through it by herself.

Melissa is a student at the BUAP and I do not know her grades, but the intensive interaction with her during the last six months makes it clear that she would be among the top 10% of bachelor students at my institute.

I got to know Melissa when she attended a mini course on the shape dynamics description of General Relativity I gave at the MexiLazos 2016 in San Luis Potosí. A few weeks later she started sending me questions about quantum gravity and shape dynamics and she asked me about one year ago whether I would be willing to be an external supervisor for her bachelor thesis, which she wanted to do on shape dynamics. During soe discussions we decided that the projects that interests her most is an exploration of the differential geometry that underlies simple shape dynamical models (in particular the global topology differential geometry of their phase spaces and their consequence for dynamics).

Melissa took her own initiative and started visiting the ICN every two weeks to discuss her progress and how to proceed. I gave her very demanding projects and I was always impressed that Melissa worked them out to a large extent and that she was always well prepared and asked me very good questions about the parts of the problems that she could not yet solve. The fact that every two weeks she takes on the travel from Puebla to Mexico City is already a good indicator for her dedication to her work. However, it is clear from her

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work that her motivation goes far beyond that and that she is a very hard working and diligent student. I value how Melissa is self-driven and her endurance in working on hard problems even if this means that she has to study quite a bit of background literature on her own. I also value that she is always very well prepared and always knows exactly what to ask and that she is often thinking ahead of what to do next. This shows some degree of scientific maturity which is above average for her level of studies.

It is worth mentioning that Melissa is a very polite person and that it is very pleasant to work with her.

This said, it is clear that recommend Melissa to participate at the summer school and that I expect that she will greatly profit from it. Please do not hesitate to contact me personally if I left any doubts about my recommendation

Sincerely,

Tim Koslowski

A handwritten signature in black ink, appearing to read 'Tim Koslowski', with a stylized, cursive script.