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Aveiro, January 30, 2019

To Whom It May Concern:

I understand that **Eros Martinelli** is applying for the *Adjoint School* to the Conference *Applied Category Theory* 2019 at Oxford University. This letter is to express my strongest support for his application.

Eros Martinelli is currently working on his PhD-thesis in category theory, more specifically on *Multicategories, Yoneda Structures, And all That*. The principal motivations for this thesis are two lines of research which have similar features but were mainly developed independently: the theory of ordered compact Hausdorff spaces and stably compact spaces on one side and of monoidal categories and representable multicategories on the other one. We note that stably compact spaces have been used extensively in the study of semantics of programming languages. With the motivation coming from logic, the concept of a multicategory was introduced by Lambek in 1979, and has been proven useful in various parts of Computer Science.
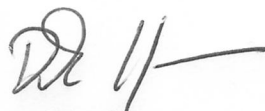
During the first part of his thesis project, Eros exhibited very good technical skills in dealing with the problem he faced in his thesis, and he already proves his ability of

- getting deep insight into difficult problems,
- finding appropriate (and thus fruitful) perspectives on a given problem,
- combining formal categorical concepts and a very good knowledge of classical mathematics.

Furthermore, Eros also showed a strong interest in mathematics in general, which became apparent in numerous discussions about logic, combinatorics and algebra, as well as interactions of category theory with physics and computer science (Eros actually has a strong background in physics). Since, almost by definition, category theory is a very interdisciplinary field, I am convinced that his participation in this school will have a very positive impact on his thesis project, providing him with new perspectives and ideas. I also strongly believe that he will contribute significantly to the success of this school.

I therefore recommend wholeheartedly his participation in this school.

Sincerely,

Dirk Hofmann