My name is Holger Stadel Borum and I am PhD student at the IT University of Copenhagen.

My PhD is about designing and implementing domain specific languages for the pension industry which means I study both code analysis and code transformation theory. During these studies I have encountered the subject of category theory with an increasing frequency, which have made me curious both as to what category theory is, and how to apply it in programming language theory. Therefore i am currently reading "Category Theory for the Sciences" by Spivak. However, I believe that in order for me to become more comfortable with the subject, I have to use it in practice. I think the summer school a perfect opportunity for me to further develop my understanding of category theory in collaboration with other motivated students.

I am mainly interested in the project on partial evaluation for two reasons: First, I have some experience with the partial evaluation in the context of computer science, which I think will make it easier for me to focus on the category theory part of the project. This experience comes both from my studies and from working as a research programmer spreadsheet Funcalc which provides a method of partial evaluation. Second, it is very likely that I will work with partial evaluation or a similar technique for some of my domain specific languages. I hope that category theory will provide me with a better understanding of partial evaluation and possibly give me some ideas for developing new and similar techniques for my PhD.

As a final remark, I also hope to meet fellow researchers at the summer school who are interested in the category theory and whom I may work with in future research projects.

Please do not hesitate to contact me if you have any questions.

Best regards

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