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## **Short Report**

The aim of this research visit was to model and investigate so called durational effects in life insurance. This means, in the context of a multiple state model for a single risk, that probabilities of transitions between certain states as well as actuarial payments are not completely determined by the current state of the policy, but may also depend on the time elapsed since entering this state.

The first moment and the variance of present values of payments related to a life insurance policy in the context of durational effects have been studied by Christiansen (2010) and Helwich (2008). During our visit at Ulm University, we found some more general results on the moment generating function and some integral equations for higher order conditional moments of present value of payments related to a life insurance policy in the context of durational effects.

We are still working on some examples to illustrate our results.

We really want to thank CDC for this grant, which will allow us to publish two papers from our visit at Ulm University.