

**REPORT ON A FUSTIPEN SUPPORTED VISIT TO FRANCE**  
**May 20-28, 2013**

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The primary purpose of this trip was to visit GANIL for purposes of collaboration on the transport description of fission shape evolution. The secondary purpose was to visit Noël Dubray at the laboratory in Bryères to explore possible collaboration on the theoretical description of fission.

I arrived in Caen on Monday, May 20, and stayed until Saturday, May 25. Most of the time was taken up by collaboration discussions with Christelle Schmitt and Pavel Nadtochy, her long-time collaborator on Langevin description of fission dynamics.

After considerable (and useful) discussion, we formulated an initial collaboration project that should be fairly well-defined and doable within a reasonable time. It is focussed on comparing the three-dimensional shape parametrization they have been using (the well-known  $ch\alpha$  family) with the more flexible five-dimensional three-quadratic-surface shape family which I (or “we”, including my US collaborator Peter Möller) have been using. This initial project, being of limited scope, is essential for the future direction of our collaboration. If it turns out (as we expect) that the 3QS shape parametrization yields more satisfactory scission shapes, then they (Schmitt and Nadtochy) will likely change to that family and it will then be possible to make very informative collaborative studies, including tests of the the strongly-damped limit upon which our treatment is based.

In addition, on Wednesday, May 22, I met with Fanny Farget to follow up on the discussions we had during my previous visit (January 2012) about her data on fission of highly excited californium. That particular case has proven to be somewhat challenging from the theoretical perspective and our discussions were very valuable.

On Friday, May 24, we held a Mini Symposium on Multidimensional treatment of Fission Dynamics in which both I and Nadtochy spoke. It was well attended and there was a great deal of positive discussion.

I visited Bryères the following Monday, May 27, and had some very productive discussions with Dubray. We formulated a joint project aimed at comparing results from his microscopic and self-consistent treatment with corresponding results from “our” macroscopic-microscopic treatment.

Altogether, the trip was very successful and I anticipate that the collaborative projects will proceed well; a future follow-up visit will likely be desirable.