

# JUSTIPEN Exit Report

Michael McNeil Forbes,  
University Of Washington

19-27 July 2008

## **Abstract**

This report details the highlights of my participation in the JUSTIPEN-  
EFES-Hokudai-UNEDF meeting at Onuma-Park, Hokkaido, Japan  
July 20-25, 2008.

It was an honour to be invited to Japan to participate in the Hokkaido meeting, where I presented two seminars about the technique and application of Density Functional Theory (DFT) to paired matter in nuclei and cold-atoms.

I found the workshop very interesting as it brought together a good mix of many different areas of expertise, as well as a mix of both young talent and senior experience. In particular, I was encouraged by the combination and use of many different techniques to understanding nuclear matter: for example computer science (G. Fann, W. Shelton), atomic physics (C. Johnson), and a wide variety of analysis techniques (I especially enjoyed hearing about the work of T. Togashi, K. Yabana, and H. Sagawa).

On a technical level, I learned of some important advances directly applicable to my study of DFT, both in terms of algorithms and basis choice, as well as in terms of physical inputs to the theory from ab-initio calculations and experiments.

I would like to thank all the organizers and facilitators of the workshop: it was both productive, and enjoyable. Exceptional hospitality was extended, received, and greatly appreciated throughout my travel and in the beautiful setting of Onuma-Park!