

## **Dominika Czerniawska, Richelle Boone and Simcha Jong (Leiden University) - Scientific Collaboration under the Shadow of a War: The Nuclear Fusion Community after the Russian Invasion of Ukraine**

This paper investigates potential changes in the global fusion community collaboration network, caused by the political reactions to the Russian invasion of Ukraine. The ties in the fusion community are old and robust. Built up in the 70s and strengthened during the collapse of the Soviet Union as well as many forthcoming political turbulences, fusion collaboration ties have been understood and used as a way to maintain and improve international relations. The current crisis raises the question of whether these ties are robust enough to survive the current political crisis between Russia and the West.

Will the conflict change the fusion community and if so, will change be permanent? While all collaboration with Russia funded by the European Commission through EUROfusion has been suspended, up to now the worldwide fusion project ITER did not take similar steps. Russia was among the founding members of ITER, and the Russian fusion community is seen by other ITER partners as contributing valuable expertise. The policy response of the fusion community regarding the collaboration with Russian scientists and institutions has thus not been cohesive.

Particularly researchers 'on the ground' wonder if and how to continue their relations and collaborations with their Russian colleagues. Using bibliometric data about fusion research and qualitative insights from documents and interviews with members of the global fusion community, we try to assess how the collaboration network and community itself might change under the current political realities.