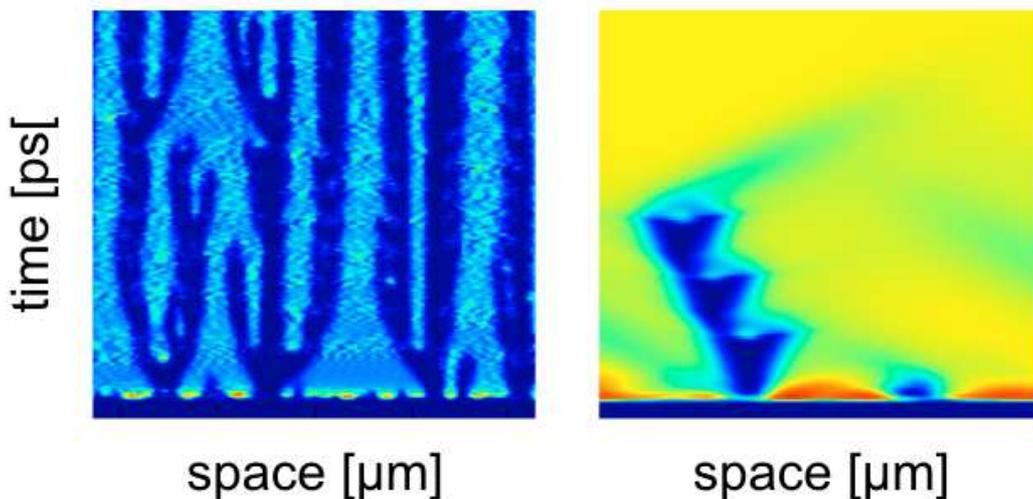


Nataliya Bobrovska @ University of Antwerp

From 17 September to 28 September 2016 I was visiting the group of Professor Michiel Wouters (Faculty of Physics, University of Antwerp, Belgium).



During this period I broadened my knowledge about the mechanisms responsible for instability in exciton-polariton condensates. For theoretical description of the exciton-polariton condensates we use the open-dissipative Gross-Pitaevskii model which describes the full system dynamics using a pair of coupled condensate-reservoir equations. The number of intensive discussions results in modification of software, which allowed observing the formation of interesting localised structures in the condensate.



During my stay I also had an occasion to present our recent results by giving a seminar talk entitled "On the dynamical instability of the exciton-polariton condensates".

In conclusion, as a result of my travel to Belgium we started the collaboration between the members of our theoretical groups from Institute of Physics, Polish Academy of Sciences and University of Antwerp. The stay allowed me for better and deeper understanding and analysis of the obtained theoretical results.