

WARSZAWSKA SZKOŁA DOKTORSKA NAUK ŚCISŁYCH I BIOMEDYCZNYCH WARSAW-4-PHD

Warsaw Doctoral School in Natural and BioMedical Sciences

WYNIKI OCENY ŚRÓDOKRESOWEJ

Mid-Term Evaluation results

CENTRUM FIZYKI TEORETYCZNEJ / CENTER FOR THEORETICAL PHYSICS		
CALEGARI SUSANE	pozytywna/positive	Over the last two years Ms Calegari has successfully Followed a broad scientific plan involving research on quite a few questions related to quantum computing with indistinguishable particles (mostly Majorana fermions, but also broader issues connected to Fermionic Linear Optics). We have found her investigations of contextuality and memory costs of simulating Majorana fermions interesting. It should be stressed that she has been pursuing a few different research avenues, with very different theoretical approaches necessary to tackle problems encountered in each of them. A nontrivial task of getting acquainted with all the necessary theoretical tools has been carried out quite succesfully. The discussin following the presentation showed her has broad knowledge on quantum computation and its realisation in condensed matter systems that could host Majorana fermions. Her awareness of broader issues related to various possible approaches to the problem of quantum contextuality was strongly visible in the longer discussion on the topic. The presented results have not been published yet, but a convincing case has been made that they will be made public soon, and it was clear that there is a realistic and well thought-out plan of disseminating them.