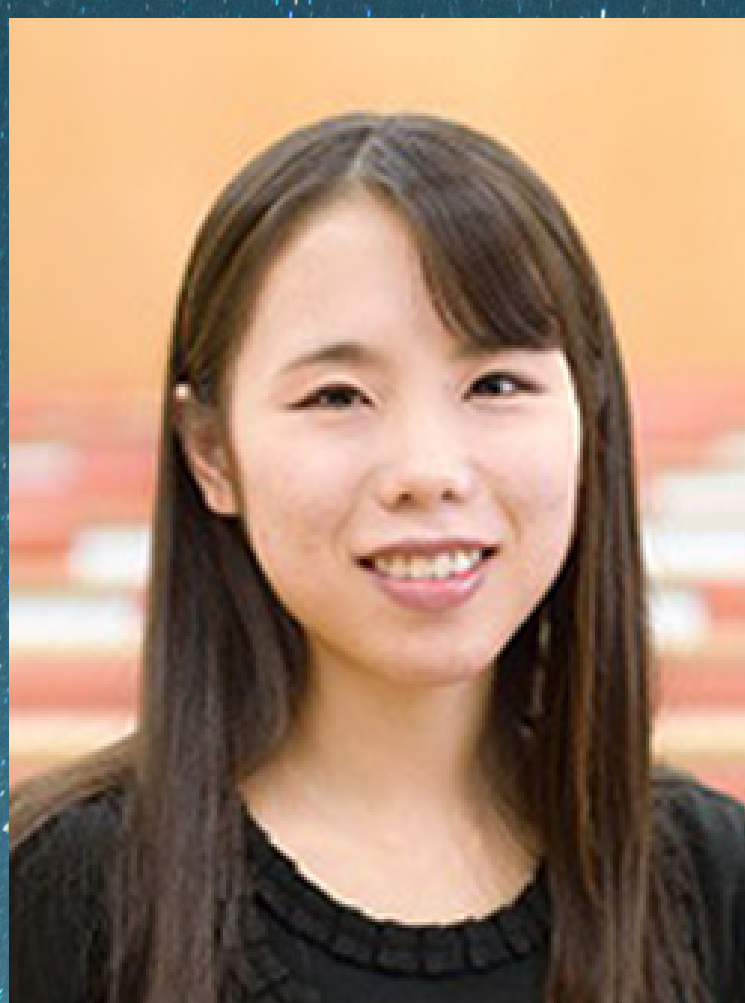


ODCZYT LAUREATKI PIERWSZEGO KONKURSU
O NAGRODĘ MARIE CURIE SKŁODOWSKIEJ
13 PAŹDZIERNIKA 2022, GODZ. 14:00

MIĘDZYNARODOWE CENTRUM MATEMATYCZNE
IM. STEFANA BANACHA
SALA 321, INSTYTUT MATEMATYCZNY PAN
UL. ŚNIADECKICH 8, WARSZAWA

MAYUKO YAMASHITA
(KYOTO)



Algebraic topology and physics

ABSTRACT: RECENTLY, THERE HAS BEEN A GROWING INTEREST IN THE RELATIONS BETWEEN ALGEBRAIC TOPOLOGY AND PHYSICS.

ALGEBRAIC TOPOLOGY IS USED TO CLASSIFY PHYSICAL SYSTEMS, AND IT CAN BE A VERY POWERFUL TOOL TO ANALYZE PHYSICAL PROBLEMS IN PURELY MATHEMATICAL WAYS.

IN THIS TALK, I EXPLAIN THIS IDEA AND SOME OF MY RELATED WORKS, WHERE WE USE GENERALIZED COHOMOLOGY THEORIES AND THEIR DIFFERENTIAL REFINEMENTS TO CLASSIFICATION PROBLEMS OF QUANTUM FIELD THEORIES.

