

Interference in Dynamics of Majorana Josephson Junction

Yuli V. Nazarov

Delft University of Technology

Faculty of Applied Sciences

Kavli Institute of Nanoscience

Lorentzweg 1

2628 CJ Delft

The Netherlands

We derive a generic phenomenological model of a Majorana Josephson junction that accounts for avoided crossing of Andreev states, and investigate its dynamics at constant bias voltage to reveal an unexpected pattern of any- π Josephson effect in the limit of slow decoherence. This effect is explained as a result of multiple interference of individual quantum paths that differ by scattering at the avoided crossings.