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MACHINE LEARNING FOR PARTICLE

IDENTIFICATION &

DEEP GENERATIVE MODELS TOWARDS

FAST SIMULATIONS FOR THE ALICE

TRANSITION RADIATION DETECTOR AT

**CERN** 



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Department of Statistics || Department of Physical Faculty of Science

University of Cape Town

This thesis is submitted in partial fulfilment of the Degree of Master of Science  ${\bf Supervised\ by:\ Dr\ Thomas\ Dietel}$ 

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# MACHINE LEARNING FOR PARTICLE IDENTIFICATION & DEEP GENERATIVE MODELS TOWARDS FAST SIMULATIONS FOR THE ALICE TRANSITION RADIATION DETECTOR AT



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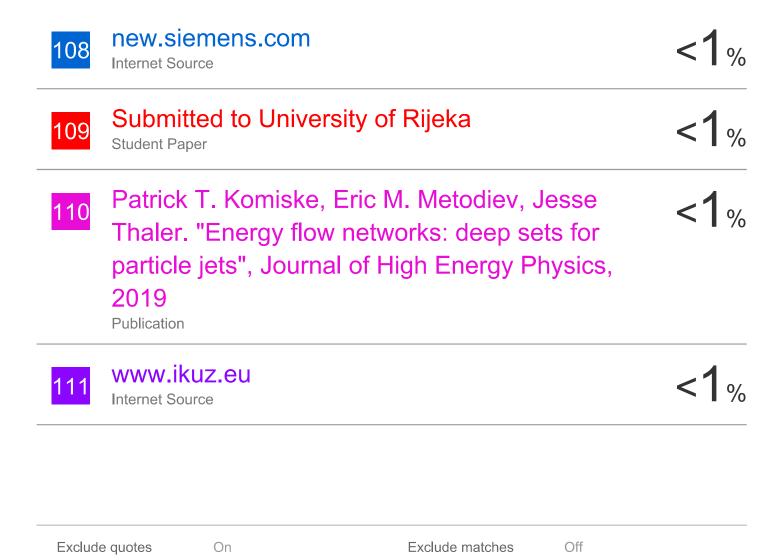
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