Call 2017

HYPER-U-P-S

Hyper-entanglement from ultra-bright photon pair sources

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SUCCESS STORY

CHALLENGE – design and fabrication of a very efficient quantum-dot based source of entangled photon pairs

SOLUTION – use of broadband microcavities to enhance the collection efficiency

PLANNED AND SURPRISING/UNPLANNED OUTCOMES

– planned – a high efficiency source

– surprising – a solution featuring a very simple fabrication technique

IMPACT

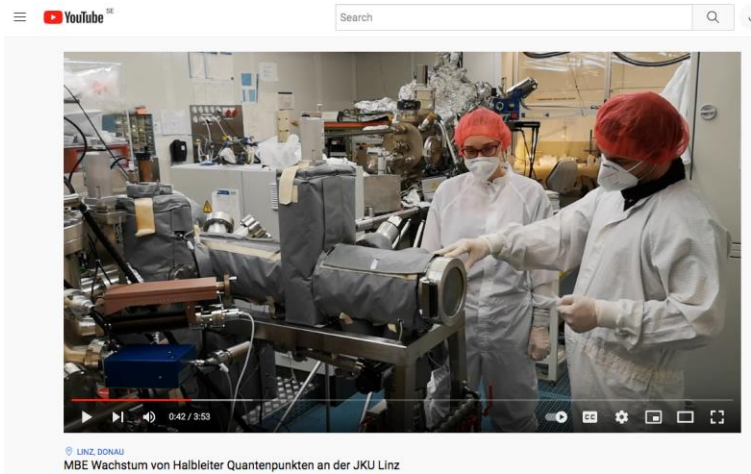
GENDER: Targeted advertisement: We aimed at position advertisements that support equal opportunities.

OPEN SCIENCE: all the results are available as open access (either via gold open access or arXiv); the codes are available at gitHub;

SCIENCE EDUCATION: guided tours for undergraduates students (Stockholm and Würzburg); participation in summer and winter schools (2 tutorial talks and 1 series of lectures); Educational video in MBE growth;

PUBLIC ENGAGEMENT: participation in

4 outreach events



IMPACT (potential users)

RELEVANT **INDUSTRY BRANCH**

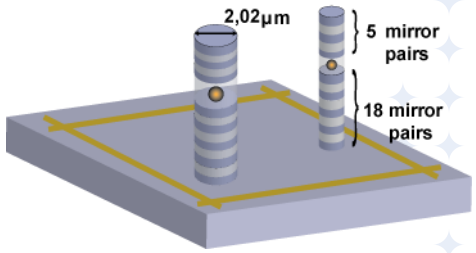
semiconductor industry; quantum industry

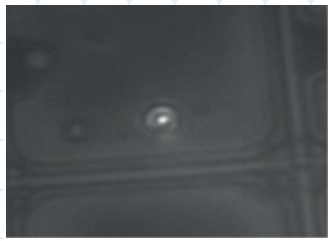
KEY COMMERCIALLY RELEVANT **APPLICATIONS**

quantum communication;

EXISTING/POTENTIAL **END USERS**

academia; defense; national infrastructures;





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