

**DEUTSCHES ELEKTRONEN-SYNCHROTRON**  
**Ein Forschungszentrum der Helmholtz-Gemeinschaft**



DESY 12-219  
YGHP-12-53  
KUNS-2427  
OCU-378  
arXiv:1211.7237  
November 2012

## **Cosmic R-String, R-Tube and Vacuum Instability**

M. Eto

*Department of Physics, Yamagata University, Yamagata, Japan*

Y. Hamada, T. Kobayashi

*Department of Physics, Kyoto University, Japan*

K. Kamada

*Deutsches Elektronen-Synchrotron DESY, Hamburg*

K. Ohashi

*Department of Mathematics and Physics, Osaka City University, Osaka, Japan*

Y. Ookouchi

*Department of Physics, Kyoto University, Japan*

*and*

*The Hakubi Center for Advanced Research, Kyoto University, Kyoto, Japan*

ISSN 0418-9833

**NOTKESTRASSE 85 - 22607 HAMBURG**