



This project is funded by the European Union under Grant Agreement no. 645479

# **E-JADE Mid-Term Review**

# **ILC background studies at**

# **ATF & the University of Tokyo**

## **March - April 2016**

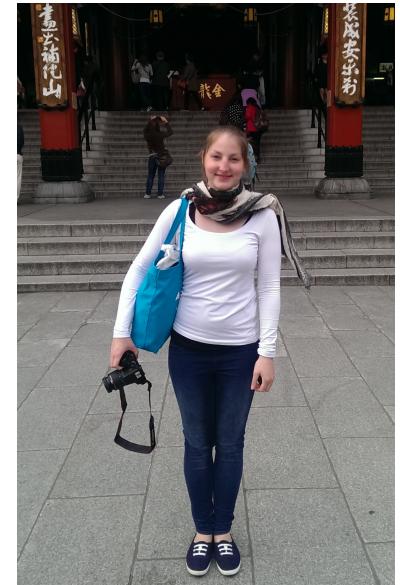
## **Anne Schütz / WP 2, 3**

E-JADE is a Marie Skłodowska-Curie Research  
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funded by the EU under Horizon2020



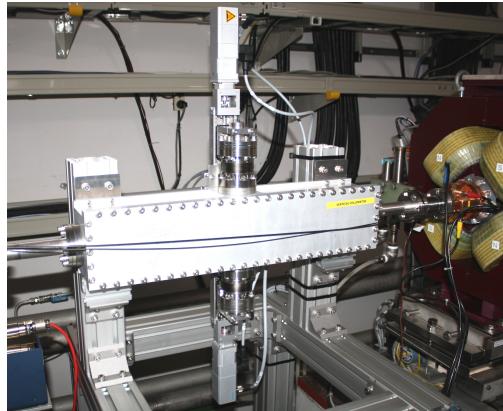
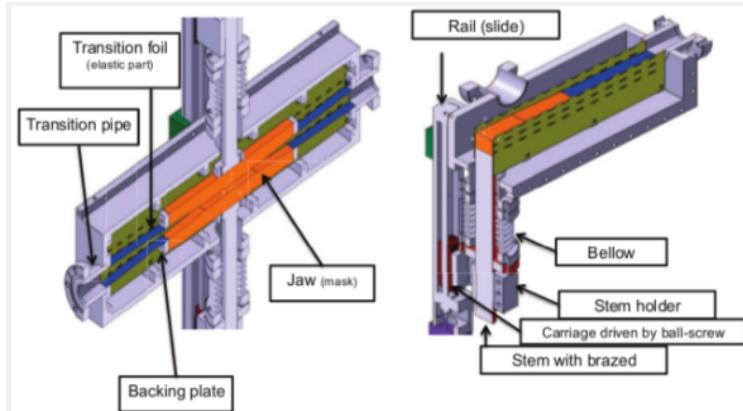
# Me

- Ph.D. at Desy, Hamburg
  - Associated with KIT, Karlsruhe
  - Ph.D. topic:  
Simulation of the ILC machine background  
wrt a possible optimization of the final-focus region
  - E-JADE working group WP 2/3
  - Practical experience in secondment in Japan:  
3  $\frac{1}{2}$  weeks at KEK to join the ATF beam time in March  
5 weeks at the University of Tokyo
- 
- 8  $\frac{1}{2}$  weeks of fun in Japan!**
- Further E-JADE secondment to Japan: 1 week in 2015



# Project at ATF2

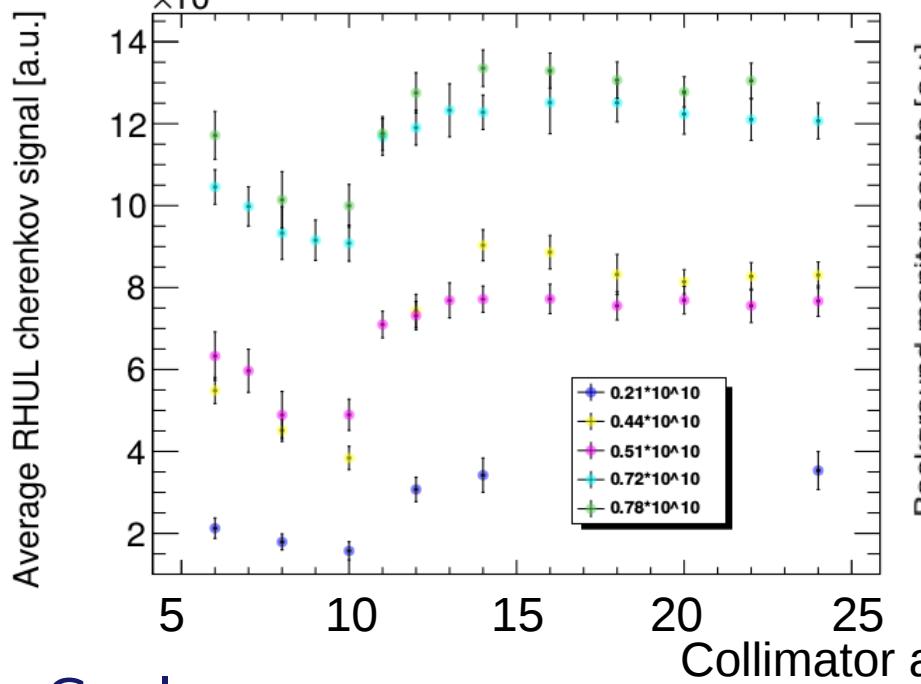
Testing the performance of a recently installed vertical beam halo collimator [Nuria Fuster Martinez (IFIC) et al.]:



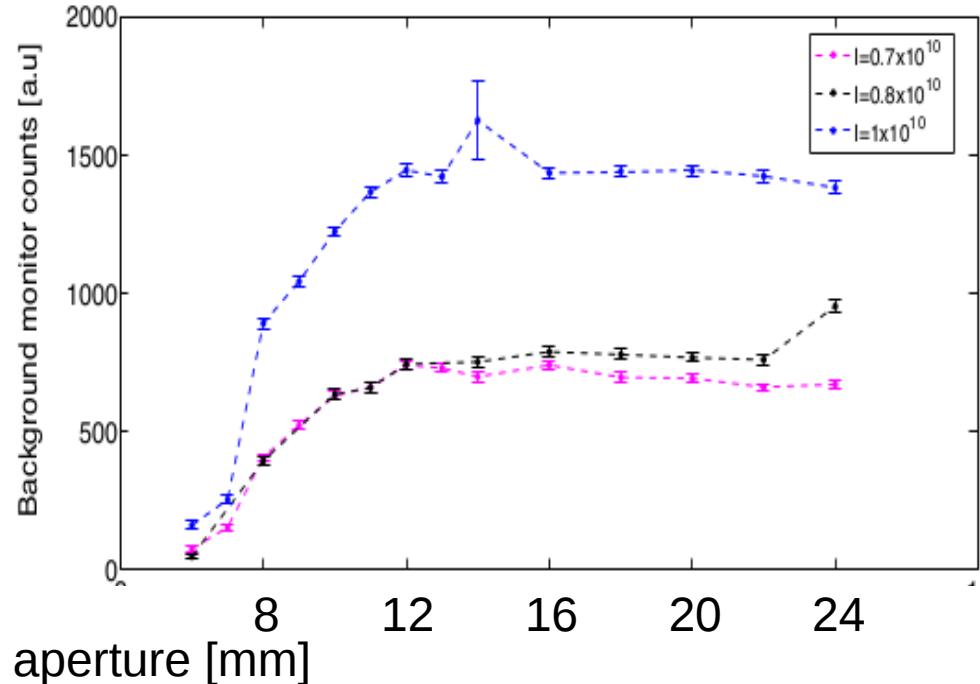
- Participation in the ATF2 beam operation time, operation of the ATF beam
- Measuring the background production/overall-reduction in dependency of the collimator apertures
- Analysing the data whilst being in the working group around Sachio Komamiya-san in the Particle Physics Department of the University of Tokyo

# Project at ATF2 – Results and goals

Cherenkov detector close to collimator



Background monitor at IP



## Goals:

- Simulation of ATF2 and the effect of the beam halo collimator with BDSIM [RHUL]
- Paper about the vertical beam halo collimator with results from beam time at ATF

# E-JADE outcomes

- Upcoming paper about results of the vertical beam halo collimator studies at ATF at KEK
- Talk at MDI workshop at KEK in March 2016 (“Second Workshop on ILC Infrastructures and CFS for Physics and Detectors”)
- Several talks in the ATF operation meetings and the group meeting in Komamiya-lab
- Next secondment hopefully in fall 2016

# Gained experience and new friends

- ATF is an international collaboration:  
people from Japan, America, UK, Spain, France, China, ...



- Working group around Komamiya-san (University of Tokyo):  
Master and Ph.D. students from Japan, post-docs and  
researchers from Japan, China and Europe



# Gained experience and new friends

- Japanese language courses: VHS in Hamburg and COTO language academy in Tokyo
- Trips to several places:



Snow Monkey  
Park, Nagano

Fushimi inari  
Kyoto

Great Buddha  
Kamakura

Ueno park  
Tokyo

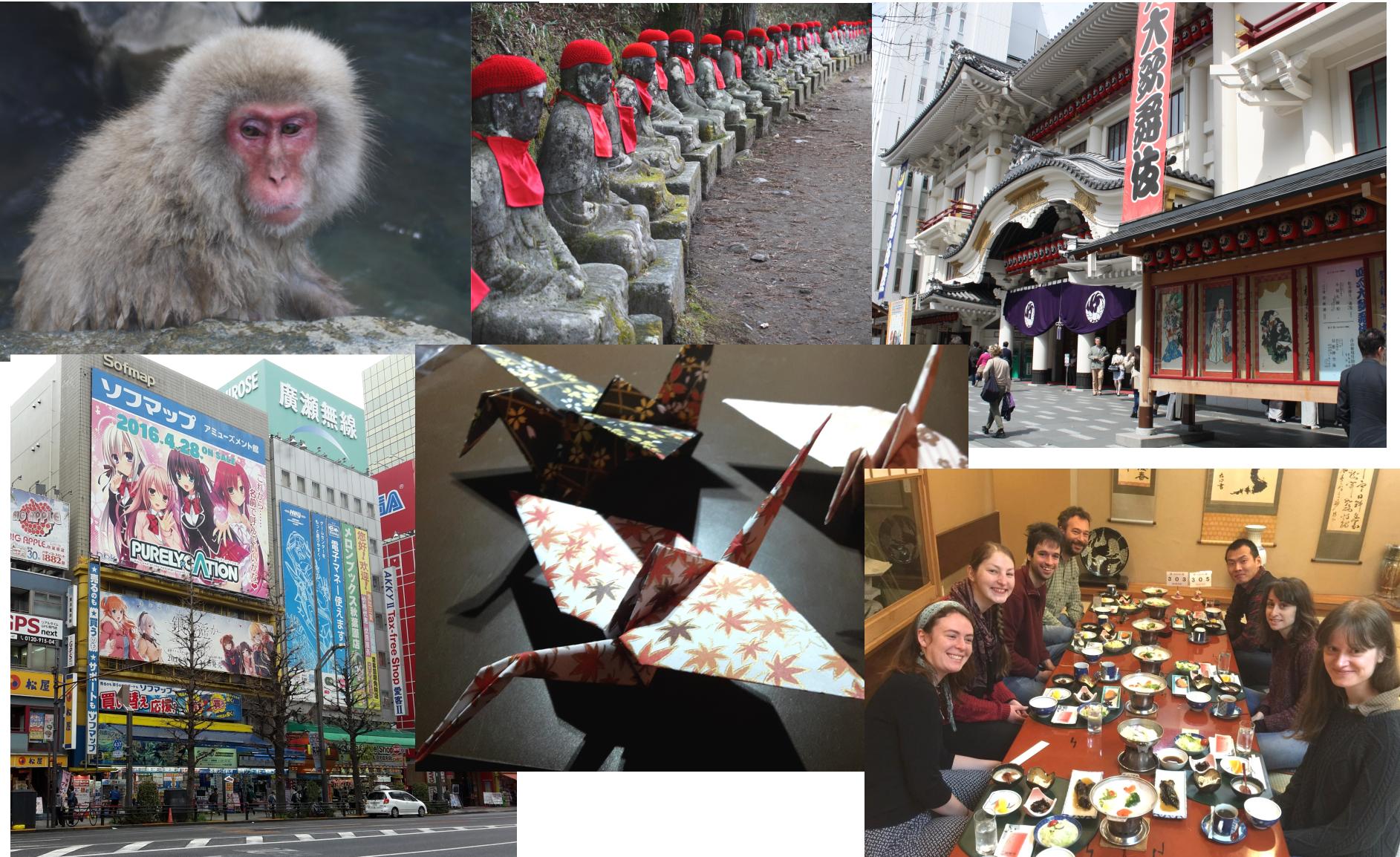
- Pen pal:

Yuichiro Tabaru  
met on the train to  
Nikko



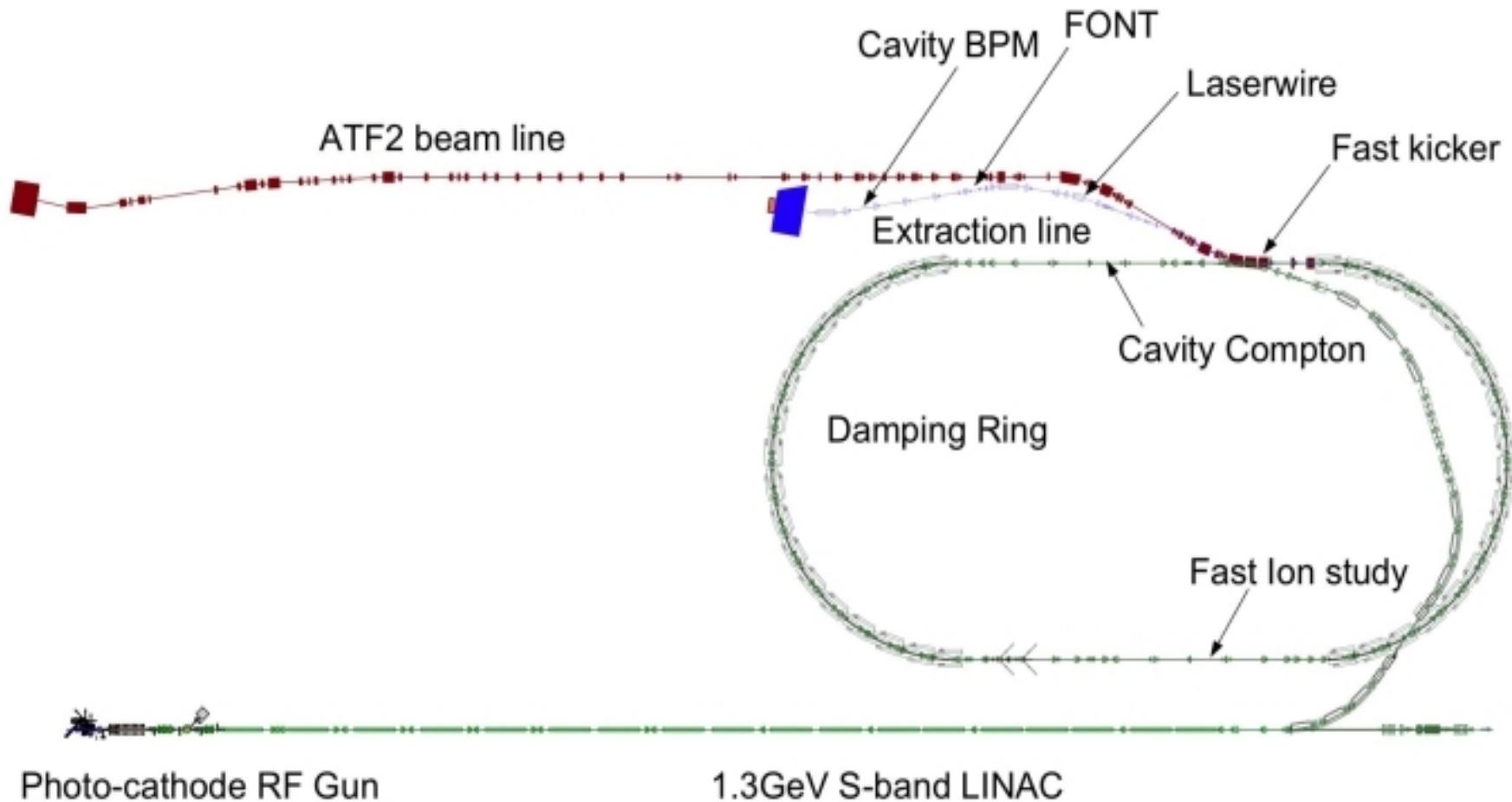
# Backup

# Gained experience and new friends



# Project at ATF2

The vertical beam halo collimator is installed in the ATF2 extraction line:



# Project at ATF2

The vertical beam halo collimator is installed in the ATF2 extraction line:

