

# News

Stefano Lacaprara, Urs Langenegger

`stefano.lacaprara@pd.infn.it`

INFN Padova, PSI

Rare decay meeting,  
CERN, 11 september 2017

- $B^+ \rightarrow K^{*+} \mu \mu$ 
  - ▶ BPH-15-009: Taiwan, Peking, NISER, Purdue
  - ▶ 2012 dataset: no look at 2016 data
  - ▶ ARC-gren light. Approval on 25/7, still issue with background
- $B^+ \rightarrow K^+ \mu \mu$ 
  - ▶ BPH-15-001 people as 15-009
  - ▶ 2012 dataset
  - ▶ Pre-App (24/11/2015). update on 8/5/2017, 21/6/2017: discussion with SC about FC and  $F_H$  coverage
- $B^0 \rightarrow K^* \mu \mu$ 
  - ▶ BPH-15-008: Milano, Padova, Peking
  - ▶ 2012 dataset, first look at 2016 data
  - ▶ PAS pub, Final Reading for paper on 20/9
- $B_s^0 \rightarrow \psi \mu \mu$ 
  - ▶ Just started, presented at last week's BPAG, NISER, IITB
  - ▶ 2016 dataset

- $B^0 \rightarrow \mu\mu$ 
  - ▶ BPH-16-004, PSI, TWU, NISER, ...
  - ▶ 2012-2016 dataset
  - ▶ Yield instability under control with double ratio
  - ▶ no-preapp yet
- $\tau \rightarrow \mu\mu\mu$ 
  - ▶ No cad i yet, Florida
  - ▶ 2016 dataset
  - ▶ last presentation 27/3: build global L, still large background, yield instability of control channels,
- $W \rightarrow \tau \rightarrow \mu\mu\mu$ 
  - ▶ No cad i yet, Milano, Rochester
  - ▶ 2016 dataset
  - ▶ last presentation 27/3: feasibility, acceptance and trigger studies, first limit
- $Z \rightarrow J/\psi\mu\mu$ 
  - ▶ BPH-16-001 Colorado
  - ▶ 2016 dataset
  - ▶ Pre-App (11/4), active discussion with ARC

Summary of current status for all the analysis, plus any work done on 2016 data (for 2012-based analysis)

|                                                                                                                                                                                     |         |                                                          |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------------------------------------|-------|
| 16:00                                                                                                                                                                               | → 16:05 | <b>News</b>                                              | 🕒 5m  |
| <b>Speakers:</b> Stefano Lacaprara (INFN sezione di Padova) , Urs Langenegger (Paul Scherrer Institut (CH))                                                                         |         |                                                          |       |
|  slide.pdf                                                                                         |         |                                                          |       |
| 16:05                                                                                                                                                                               | → 16:15 | <b>BPH-15-009 <math>B \rightarrow K^* \mu \mu</math></b> | 🕒 10m |
| <b>Speaker:</b> Dr. Mauro Dinardo (Università & INFN, Milano-Bicocca (IT))                                                                                                          |         |                                                          |       |
|  2017_09_11 - BPH.p...                                                                             |         |                                                          |       |
| 16:15                                                                                                                                                                               | → 16:25 | <b>BPH-15-001 <math>B \rightarrow K \mu \mu</math></b>   | 🕒 10m |
| <b>Speakers:</b> Dayong Wang (Peking University (CN)) , Geng Chen (Peking University (CN))                                                                                          |         |                                                          |       |
| 16:25                                                                                                                                                                               | → 16:35 | <b>BPH-15-009 <math>B \rightarrow K^* \mu \mu</math></b> | 🕒 10m |
| <b>Speaker:</b> Sanjay Kumar Swain (National Institute of Science Education and Research (IN))                                                                                      |         |                                                          |       |
|  BPH-KSTPMM.pdf                                                                                    |         |                                                          |       |
| 16:35                                                                                                                                                                               | → 16:45 | <b><math>\tau \rightarrow 3\mu</math> from W</b>         | 🕒 10m |
| <b>Speakers:</b> Luca Guzzi (Università & INFN, Milano-Bicocca (IT)) , Riccardo Manzoni (Università & INFN Milano Bicocca) , Sara Fiorendi (Università & INFN, Milano-Bicocca (IT)) |         |                                                          |       |



## Additional stuff

Additional or backup slides



# Bibliography I

