

# **ICFA Mini-Workshop on Future gamma-gamma Collider**

## **Report of Contributions**

Contribution ID: 2

Type: **not specified**

# Welcome

**Primary author:** Mr XUE, Qikun

**Presenter:** Dr ZHAO, Zhentang (Shanghai Institute of Applied Physics)

Contribution ID: 3

Type: **not specified**

# Welcome

**Primary author:** Mr XUE, Qikun

Contribution ID: 4

Type: **not specified**

# Welcome

**Primary author:** Mr XUE, Qikun

Contribution ID: 5

Type: **not specified**

## Opening remarks

**Primary author:** Prof. WANG YIFANG, Yifang (IHEP)

Contribution ID: 6

Type: **not specified**

## Motivation of this workshop

**Primary author:** Dr CHOU, Weiren (FNAL)

Contribution ID: 7

Type: **not specified**

## Overview of $\gamma\gamma$ collider

**Primary author:** Prof. TELNOV, Valery (Budker Institute of Nuclear Physics)

Contribution ID: 8

Type: **not specified**

## Sciences of $\gamma\gamma$ collider



Contribution ID: 9

Type: **not specified**

# Welcome

Contribution ID: **10**

Type: **not specified**

## Opening remarks

**Presenter:** Prof. WANG YIFANG, Yifang (IHEP)

Contribution ID: 11

Type: **not specified**

## Welcome

*Sunday, April 23, 2017 9:00 AM (5 minutes)*

**Presenter:** Prof. XUE, Qikun

**Session Classification:** General

Contribution ID: 12

Type: **not specified**

## Opening remarks

*Sunday, April 23, 2017 9:05 AM (5 minutes)*

**Presenter:** Prof. WANG YIFANG, Yifang (IHEP)

**Session Classification:** General

Contribution ID: 13

Type: **not specified**

## Motivation of this workshop

*Sunday, April 23, 2017 9:10 AM (30 minutes)*

**Presenter:** Dr CHOU, Weiren (FNAL)

**Session Classification:** General

Contribution ID: 14

Type: **not specified**

## Overview of $\gamma\gamma$ collider

*Sunday, April 23, 2017 9:40 AM (30 minutes)*

**Presenter:** Dr TELNOV, Valery

**Session Classification:** General

Contribution ID: 15

Type: **not specified**

## Sciences of $\gamma\gamma$ collider

*Sunday, April 23, 2017 10:10 AM (30 minutes)*

**Presenter:** Dr VELASCO, Mayda

**Session Classification:** General

Contribution ID: 16

Type: **not specified**

## **New physics in an intermediate energy e-e- collider**

*Sunday, April 23, 2017 11:10 AM (30 minutes)*

**Presenter:** Dr CHEN, Ziheng

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider



Contribution ID: 17

Type: **not specified**

## **ILC-based $\gamma\gamma$ collider**

*Sunday, April 23, 2017 11:40 AM (30 minutes)*

**Presenter:** YOKOYA, Kaoru (KEK)

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: **18**

Type: **not specified**

## **CLIC-based $\gamma\gamma$ collider**

*Sunday, April 23, 2017 12:10 PM (30 minutes)*

**Presenter:** Dr LACOMA, Edu Marin

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 19

Type: **not specified**

## **X-band linac based $\gamma\gamma$ collider**

*Sunday, April 23, 2017 2:00 PM (30 minutes)*

**Presenter:** Dr KIM, Kwang-Je

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 20

Type: **not specified**

## **Sapphire/HFiTT and FCC/CEPC for $\gamma\gamma$ collider**

*Sunday, April 23, 2017 2:30 PM (30 minutes)*

**Presenter:** Dr CHOU, Weiren (FNAL)

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 21

Type: **not specified**

## Challenge to the booster and linac

*Sunday, April 23, 2017 3:00 PM (30 minutes)*

**Presenter:** Prof. ZHANG CHUANG, Chuang (Institute of High Energy Physics, Chinese Academy of Sciences)

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 22

Type: **not specified**

## **Beam driven acceleration for $\gamma\gamma$ collider (Facet)**

*Sunday, April 23, 2017 4:30 PM (30 minutes)*

**Presenter:** Dr HOGAN, Mark

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 23

Type: **not specified**

## **Review of plasma based acceleration**

*Sunday, April 23, 2017 4:00 PM (30 minutes)*

**Presenter:** Dr BINGHAM, Bob

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 24

Type: **not specified**

## **Key physics of plasma based acceleration and its implication to $\gamma\gamma$ collider**

*Sunday, April 23, 2017 5:00 PM (30 minutes)*

**Presenter:** Dr LU, Wei (Tsinghua University)

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider



Contribution ID: 25

Type: **not specified**

## **Beam driven acceleration for $\gamma\gamma$ collider**

**Presenter:** Dr HOGAN, Mark

Contribution ID: 26

Type: **not specified**

## **Dielectric wakefield acceleration for $\gamma\gamma$ collider**

**Presenter:** Dr JING, Chunguang

Contribution ID: 27

Type: **not specified**

## **DLA accelerator and possible application for $\gamma\gamma$ collider**

**Presenter:** Prof. BYER, Bob

Contribution ID: 28

Type: **not specified**

## **SLAC AAC program and US Roadmap**

*Monday, April 24, 2017 9:00 AM (30 minutes)*

**Presenter:** Dr YAKIMENKO, Vitaly

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 29

Type: **not specified**

## **Dielectric wakefield acceleration for $\gamma\gamma$ collider**

*Monday, April 24, 2017 10:00 AM (30 minutes)*

**Presenter:** Dr JING, Chunguang

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: **30**

Type: **not specified**

## **DLA accelerator and possible application for $\gamma\gamma$ collider**

*Monday, April 24, 2017 9:30 AM (30 minutes)*

**Presenter:** Prof. BYER, Robert Louis

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 31

Type: **not specified**

## **Large scale PIC simulations for future HEP accelerators**

*Monday, April 24, 2017 11:00 AM (30 minutes)*

**Presenter:** Dr SILVA, Luis

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 32

Type: **not specified**

## **Development of laser plasma acceleration and light sources**

*Monday, April 24, 2017 11:30 AM (30 minutes)*

**Presenter:** Dr SHENG, Zhengming

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider



Contribution ID: 33

Type: **not specified**

## **Proton driven plasma wakefield acceleration: AWAKE and beyond**

*Monday, April 24, 2017 12:00 PM (30 minutes)*

**Presenter:** Dr XIA, Guoxing

**Session Classification:** Accelerator technology for  $\gamma\gamma$  collider

Contribution ID: 34

Type: **not specified**

## **Laser architecture for $\gamma\gamma$ collider**

*Monday, April 24, 2017 2:00 PM (30 minutes)*

**Presenter:** Dr BARTY, Chris

**Session Classification:** Laser technology for  $\gamma\gamma$  collider

Contribution ID: 35

Type: **not specified**

## **XCAN laser for $\gamma\gamma$ collider applications**

*Monday, April 24, 2017 2:30 PM (30 minutes)*

**Presenter:** Dr MOUROU, Gerard

**Session Classification:** Laser technology for  $\gamma\gamma$  collider

Contribution ID: 36

Type: **not specified**

## **Laser driver for high-energy physics**

*Monday, April 24, 2017 3:00 PM (30 minutes)*

**Presenter:** Dr MOUROU, Gerard

**Session Classification:** Laser technology for  $\gamma\gamma$  collider

Contribution ID: 37

Type: **not specified**

## **CO2 based laser for $\gamma\gamma$ collider**

*Monday, April 24, 2017 4:00 PM (30 minutes)*

**Presenter:** POGORELSKY, Igor (B)

**Session Classification:** Laser technology for  $\gamma\gamma$  collider

Contribution ID: **38**

Type: **not specified**

## **Ultraintense laser development and laser driven particle acceleration at SIOM**

*Monday, April 24, 2017 4:30 PM (30 minutes)*

**Presenter:** Dr LENG, Yuxin

**Session Classification:** Laser technology for  $\gamma\gamma$  collider

Contribution ID: 39

Type: **not specified**

## **Development of high power laser systems at LFRC**

*Monday, April 24, 2017 5:00 PM (30 minutes)*

**Presenter:** Dr SU, Jingqin

**Session Classification:** Laser technology for  $\gamma\gamma$  collider

Contribution ID: 40

Type: **not specified**

## **Laser driven particle acceleration and radiation source development at LFRC**

*Tuesday, April 25, 2017 10:00 AM (30 minutes)*

**Presenter:** Dr GU, Yuqiu

**Session Classification:** Beam-laser interaction & applications



Contribution ID: 41

Type: **not specified**

## **KEK ICS experiment**

*Tuesday, April 25, 2017 9:30 AM (30 minutes)*

**Presenter:** Dr URAKAWA, Junji

**Session Classification:** Beam-laser interaction & applications

Contribution ID: 42

Type: **not specified**

## **Study of laser-beam interaction**

*Tuesday, April 25, 2017 9:00 AM (30 minutes)*

**Presenter:** Dr BRUNETTI, Enrico

**Session Classification:** Beam-laser interaction & applications

Contribution ID: 43

Type: **not specified**

## Interaction region of $\gamma\gamma$ collider

*Tuesday, April 25, 2017 11:30 AM (30 minutes)*

**Presenter:** Dr TAKAHASHI, Tohru (Hiroshima University)

**Session Classification:** Beam-laser interaction & applications

Contribution ID: 44

Type: **not specified**

## **Generation of high intensity $\gamma$ -ray in critical density plasma**

*Tuesday, April 25, 2017 12:00 PM (30 minutes)*

**Presenter:** YU, Jinqing (Peking University)

**Session Classification:** Beam-laser interaction & applications

Contribution ID: 45

Type: **not specified**

## **Tsinghua Thomson scattering x-ray source (TTX) and applications**

*Tuesday, April 25, 2017 11:00 AM (30 minutes)*

**Presenter:** Prof. HUANG, wenhui (Tsinghua University)

**Session Classification:** Beam-laser interaction & applications

Contribution ID: 46

Type: **not specified**

## ICS $\gamma$ -ray and application at IHEP

*Tuesday, April 25, 2017 2:30 PM (30 minutes)*

**Presenter:** HUANG, Yongsheng (Graduate School of CNNC)

**Session Classification:** Beam-laser interaction & applications

Contribution ID: 47

Type: **not specified**

## $\gamma$ -ray station at SSRF (SLEGS)

*Tuesday, April 25, 2017 2:00 PM (30 minutes)*

**Presenter:** Dr MA, Yugang

**Session Classification:** Beam-laser interaction & applications

Contribution ID: 48

Type: **not specified**

## Overview of High Intensity $\gamma$ -ray Source (HIGS)

*Tuesday, April 25, 2017 3:00 PM (30 minutes)*

**Presenter:** LI, Jingyi (U)

**Session Classification:** Beam-laser interaction & applications