

# **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, 23 April 2017 09:00 (5 minutes)*

**Presenter:** Prof. XUE, Qikun

**Session Classification:** General

Contribution ID: **12**Type: **not specified**

## Opening remarks

*Sunday, 23 April 2017 09:05 (5 minutes)***Presenter:** Prof. WANG YIFANG, Yifang (IHEP)**Session Classification:** General

Contribution ID: **13**

Type: **not specified**

## Motivation of this workshop

*Sunday, 23 April 2017 09:10 (30 minutes)*

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

**Session Classification:** General

Contribution ID: 14

Type: **not specified**

## Overview of $\gamma\gamma$ collider

*Sunday, 23 April 2017 09:40 (30 minutes)***Presenter:** Dr TELNOV, Valery**Session Classification:** General

Contribution ID: 15

Type: **not specified**

## Sciences of $\gamma\gamma$ collider

*Sunday, 23 April 2017 10:10 (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, 23 April 2017 11:10 (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, 23 April 2017 11:40 (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, 23 April 2017 12:10 (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, 23 April 2017 14:00 (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, 23 April 2017 14:30 (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, 23 April 2017 15:00 (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, 23 April 2017 16:30 (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, 23 April 2017 16:00 (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, 23 April 2017 17:00 (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, 24 April 2017 09:00 (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, 24 April 2017 10:00 (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, 24 April 2017 09:30 (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, 24 April 2017 11:00 (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, 24 April 2017 11:30 (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, 24 April 2017 12:00 (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, 24 April 2017 14:00 (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, 24 April 2017 14:30 (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, 24 April 2017 15:00 (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, 24 April 2017 16:00 (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, 24 April 2017 16:30 (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, 24 April 2017 17:00 (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, 25 April 2017 10:00 (30 minutes)*

**Presenter:** Dr GU, Yuqiu

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



Contribution ID: 41

Type: **not specified**

## KEK ICS experiment

*Tuesday, 25 April 2017 09:30 (30 minutes)***Presenter:** Dr URAKAWA, Junji**Session Classification:** Beam-laser interaction & applications

Contribution ID: 42

Type: **not specified**

## Study of laser-beam interaction

*Tuesday, 25 April 2017 09:00 (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, 25 April 2017 11:30 (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, 25 April 2017 12:00 (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, 25 April 2017 11:00 (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, 25 April 2017 14:30 (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, 25 April 2017 14:00 (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, 25 April 2017 15:00 (30 minutes)***Presenter:** LI, Jingyi (U)**Session Classification:** Beam-laser interaction & applications