

# dong jo, kim

## Curriculum Vitae

## Present Status

#### 2021-current

- + University Lecturer
- + Department of Physics, University of Jyvaskyla, Finland

#### 2017-2020

- + Senior Researcher
- + Department of Physics, University of Jyvaskyla, Finland

#### 2019

- + Title of Docent
- + Department of Physics, University of Jyvaskyla, Finland

#### 2013-2016

- + Senior Researcher
- + Helsinki Institute of Physics, Finland

## 2010-2012

- + Senior Researcher
- + Department of Physics, University of Jyvaskyla, Finland

#### 2006-2010

- + Postdoctoral Researcher
- + Department of Physics, University of Jyvaskyla, Finland

#### 2005-2006

- + Researcher Associate
- + Department of Physics, University of Yonsei, Republic of Korea
- + Visiting Scientist
- + Los Alamos National Lab, New Mexico, USA

## 2000-2005

- + Visiting Scientist
- + Brookhaven National Lab, New York, USA

## Education

2000-2004 Ph.D, University of Yonsei, Seoul, South Korea.

1998-1999 Ms.D, University of Yonsei, Seoul, South Korea.

1992-1998 Bs.D, University of Yonsei, Seoul, 2 years Military service.

## Ph.D thesis

title  $J/\psi$  production in d+Au and p+p collisions at  $\sqrt{s}=$  200GeV

supervisors J.H Kang, Y.J Kweon, I.D Jeon, K.S Ju, I.H Park

description Nuclear Physics

## Master thesis

title Optical Tension Measurement of Fine Wires for Muon tracking chamber in PHENIX

supervisors J.H Kang, Y.J Kweon, I.D Jeon

description Nuclear Physics

# Research Experience

1997-present **PHENIX Collaboration**, *RHIC*, BNL, Brookhaven National Lab.

2006–present **ALICE Collaboration**, *LHC*, CERN, European Organization for Nuclear Research.

#### Research activities

1997–1998 PHENX Muon Identification and Muon Tracking Chamber construction and Electronics test at BNL, PHENIX, RHIC, BNL.

1998–2000 1. PHENIX Muon Tracking Chamber test setup and Chamber resolution study at BNL, PHENIX, RHIC, BNL.

2. PHENIX Muon Arm Calibration software development, PHENIX, RHIC, BNL.

2002-2004 1. PHENIX Online Calibration Manager at BNL, PHENIX, RHIC, BNL.

2. PHENIX Deputy Data Production Manager at BNL, PHENIX, RHIC, BNL.

**3. Development of PHENIX Muon Tracker Reconstruction software**, *PHENIX*, RHIC, BNL.

**4. Establish Yonsei Linux cluster and reconstruction manager**, *PHENIX*, RHIC, BNL.

2006–2007 **1. Publication of**  $J/\psi$  measurements in various collision species, *PHENIX*, RHIC, BNL.

**2.** The final result of open charm measurement in various collision species, *PHENIX*, RHIC, BNL.

2008–2013 1. ALICE Jet and Flow Correlation analysis, ALICE, LHC, CERN.

2. PHENIX direct photon Correlation analysis, PHENIX, RHIC, BNL.

3. ALICE Grid Computing project leader for Finland, ALICE, LHC, CERN.

4. Jyvaskyla M-Grid Computing management, ALICE, LHC, Finland.

5. Rapidity Gap analysis in PHENIX/ALICE, ALICE, LHC, CERN.

6. ALICE Central Trigger System(CTP) analysis and Monitoring software development, *ALICE*, LHC, CERN.

7. ALICE Jet Correlation Analysis Task contact person, ALICE, LHC, CERN.

8. ALICE Shift Management System and Collaboration Database Development and contact person, *ALICE*, LHC, CERN.

2014–2019 **9. ALICE Flow Analysis working group convenor**, *ALICE*, LHC, CERN.

- 2014-current 1. ALICE Flow and Jet Correlation analysis, ALICE, LHC, CERN.
  - 2. ALICE Grid Computing project leader for Finland, ALICE, LHC, CERN.
  - 3. ALICE Correlation and Jet Physics group member, ALICE, LHC, CERN.
  - 4. Paper Review Committee, ALICE, LHC, CERN.

# Teaching Experience

- 1992-2002 Tutors for high school students, Mathemetics, English, Physics.
- 1997-1999 Teaching Assistant, Physics, Yonsei, University.
- Teaching Assistant, Physics, Yonsei, University. 2001-2002
- Teaching, Jyvaskyla University, Experimental Methods in Particle Physics. 2015-2016
- Teaching, Jyvaskyla University, Ultra-relativistic Heavy Ion Physics. 2008-current

# Leadership and supervision experience

- 2014-2015, Tomas Snellman, MSc supervisor, Jyvaskyla University, Finland.
- 2015-2016, Elias Barba Moral, MSc supervisor, Jyvaskyla University, Finland.
- 2016, Myeongguen Song, Ph.D. opponent, Yonsei University, Korea.
- 2016-2017, Jasper Parkkila, MSc supervisor, Jyvaskyla University, Finland.
- 2017-2018, Oskari Saarimaki, MSc supervisor, Jyvaskyla University, Finland.
- 2016-2019, Tomas Snellman, Ph.D. supervisor, Jyvaskyla University, Finland.
- 2017-2020, Jasper Parkkila, Ph.D. supervisor, Jyvaskyla University, Finland.
- 2019, Hyeonjoong Kim, Ph.D. opponent, Yonsei University, Korea.
- 2018-current, Oskari Saarimäki, Ph.D. supervisor, Jyvaskyla University, Finland.
- **2020-current**, Anna Önnerstad, Ph.D. supervisor, Jyvaskyla University, Finland.
- 2020-current, Heidi Rytkönen, Ph.D. supervisor, Jyvaskyla University, Finland.
- **2021-current**, *Laura Huhta*, Ph.D. supervisor, Jyvaskyla University, Finland.
- **2021-current**, *Maxim Virta*, Ph.D. supervisor, Jyvaskyla University, Finland.
- 2021-current, Cindy Mordasini, Postdoc supervisor, Jyvaskyla University, Finland.

## Student Training

- 2009, Mikko Kervinen, CERN/HIP Summer Intership, CERN, Switzerland.
- 2011, Esko Pohjoisaho, CERN/HIP Summer Intership, CERN, Switzerland.
- **2014**, Tomas Snellman, CERN Summer Intership, CERN, Switzerland.
- 2015, Elias Barba Moral, Jyvaskyla Summer Intership, Jyvaskyla University, Finland.
- 2016, Jasper Parkkila, CERN/HIP Summer Intership, CERN, Switzerland.
- 2017, Oskari Saarimaki, CERN/HIP Summer Intership, CERN, Switzerland.
- 2017, Nimmitha Karunarathna, CERN Summer Intership, CERN, Switzerland.
- 2017, Teemu Kovanen, Jyvaskyla Summer Intership, Jyvaskyla University, Finland.
- 2018, Elin Nyman, CERN/HIP Summer Intership, CERN, Switzerland.
- 2022, Teemu Kallio, Jyvaskyla Summer Intership, Jyvaskyla University, Finland.

# Computer skills

Database/Web ALICE Shift Management System[SMS] Development

Database/Web ALICE Collaboration Database[ACDB] Development

GRID Grid Service management for LHC/ALICE in Finland with Nordic Data Grid

Facility(NDGF)

C/C++ Extensive C and C++ programming experiences

Scripting Extensive use of shell scripting for automatic data processing, shell, Perl, Tcl/Tk, python

Database Working knowledge of Database(OBJY, Postgres, MySQL)

System Working knowledge of Unix, Linux(System administration)

System Experiences of Linux clustering

Programming Extensive use of ROOT, HTML, Labview, and Latex

Electronics Working knowledge of CAMAC and VME

## Research Interests

 $\mathsf{QGP} \quad \mathsf{The} \; \mathsf{properties} \; \mathsf{of} \; \mathsf{hot} \; \mathsf{partonic} \; \mathsf{matter} \big( \; \mathsf{so\text{-}called} \; \mathsf{QGP} \big( \mathsf{Quark\text{-}Gluon} \; \mathsf{Plasma} \big) \; \big) \; \mathsf{by} \; \mathsf{using} \; \mathsf{flow} \; \mathsf{and} \; \mathsf{deg} \; \mathsf{properties} \; \mathsf{propert$ 

 $high-p_T$  particle or jet correlation technique

(p)QCD The measurement of partonic primordial momenta,  $k_T$ , the fragmentation function, two-particle

correlation, and jets

Data Analysis C++ based large scale data analysis framework development and Grid Computing

Hardware Fast Jet Trigger module development with EMCAL(Electro Magnetic Calorimeter)

Hardware Detector upgrade projects, Time Projection Chamber and Forward detectors in ALICE experi-

ment

# Talks, presentations

Scientific talks over 80, link.

## Research output

Peer reviewed articles over 500, link.

Selected publications, link.

## Merits

Funding 2022-2030, Centre of Excellence in Quark Matter, University of Jyväskylä, Finland.

Teaching 2022, ALICE Thesis award by Jasper Parkkila, CERN, Switzerland.

Teaching 2019, University Padagogy study, University of Jyväskylä, Finland.

## Hobbies

1998-2000, Hapkido, Seoul, Korea.

2009-2013, Hapkido, Jyvaskyla, Finland.

2014-2017, Football, Komeetat, Jyvaskyla, Finland.

2018-current, Football, JK Cityketut, Jyvaskyla, Finland.

2013-current, Ultimate frisbee, Jyli, Jyvaskyla, Finland.

2000-2005, Basketball, BNL Basketball team, New York, USA.

2015-current, Basketball, JyNMKY, Jyvaskyla, Finland.

-, Running, Swimming, Cross country ski.

# More information

can be found at https://github.com/dongjokim/dongjokim.github.com including the full  $\mbox{cv},\ ..$