

# dong jo, kim

## Curriculum Vitae, June 7, 2021

## Present Status

#### 2017-current

- + 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  $\sqrt{s}=200 \text{GeV}$ 

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

#### 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 of d+Au data for open charm measurement in PHENIX, PHENIX, RHIC, BNL.

2004–2007 **1.** $J/\psi$  analysis and publications in various collision systems, *PHENIX*, RHIC, BNL.

**2.Final result of open charm measurement in various collision systems**, *PHENIX*, RHIC, BNL.

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

**2.PHENIX** direct  $\gamma - hadron$  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–current **1.ALICE Flow and Jet Correlation analysis**, *ALICE*, LHC, CERN.

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

3.CSC project manager, jyy2631 for finnish ALICE-Grid contribution, and 2003154/2003112 for Machine learning, *ALICE*, LHC, CERN.

**4.ALICE Correlation and Jet Physics group member**, *ALICE*, LHC, CERN.

**5.ALICE Flow Analysis working group convenor**, *ALICE*, LHC, CERN. **6.Paper Review Committee member**, *ALICE*, LHC, CERN.

# Teaching Experience

1992–2002 **Tutors for high school students**, *Mathemetics*, English, Physics.

1997–1999 **Teaching Assistant**, *Physics*, Yonsei, University.

2001–2002 **Teaching Assistant**, *Physics*, Yonsei, University.

2015–2016 **Teaching**, *Jyvaskyla University*, Experimental Methods in Particle Physics.

2008-current **Teaching**, *Jyvaskyla University*, Ultra-relativistic Heavy Ion Physics.

#### Student

2014-2015, Tomas Snellman, MSc supervisor, Jyvaskyla University, Finland.

2015-2016, Elias Barba Moral, MSc supervisor, Jyvaskyla University, Finland.

2016, Myeongguen Song, PhD 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, PhD supervisor, Jyvaskyla University, Finland.

2017-current, Jasper Parkkila, PhD supervisor, Jyvaskyla University, Finland.

2018-current, Oskari Saarimaki, PhD supervisor, Jyvaskyla University, Finland.

2019, Hyeonjoong Kim, PhD opponent, Yonsei University, Korea.

**2020-current**, Anna Onnerstad, PhD supervisor, Jyvaskyla University, Finland.

2021-current, Heidi Rytkonen, PhD supervisor, Jyvaskyla University, Finland.

# Student Training

2009, Mikko Kervinen, CERN/HIP Summer Internship, CERN, Switzerland.

**2011**, Esko Pohjoisaho, CERN/HIP Summer Internship, CERN, Switzerland.

2014, Tomas Snellman, CERN Summer Internship, CERN, Switzerland.

2015, Elias Barba Moral, Jyvaskyla Summer Internship, Jyvaskyla University, Finland.

2016, Jasper Parkkila, CERN/HIP Summer Internship, CERN, Switzerland.

2017, Oskari Saarimaki, CERN/HIP Summer Internship, CERN, Switzerland.

2017, Nimmitha Karunarathna, CERN Summer Internship, CERN, Switzerland.

2017, Teemu Kovanen, Jyvaskyla Summer Internship, Jyvaskyla University, Finland.

**2018**, Elin Nyman, CERN/HIP Summer Internship, CERN, Switzerland.

2019, Jani Penttala, CERN/HIP Summer Internship, CERN, Switzerland.

2020, Kevin Gilbert, Jyvaskyla Summer Internship, Jyvaskyla University, Finland.

2021, Maxim Virta, CERN/HIP Summer Internship, Jyvaskyla University, Finland.

# Computer skills

Database/Web ALICE Shift Management System[SMS] Development

Database/Web ALICE Collaboration Database[ACDB] Development

 $\mathsf{GRID} \quad \mathsf{Grid} \quad \mathsf{Service} \quad \mathsf{management} \quad \mathsf{for} \quad \mathsf{LHC}/\mathsf{ALICE} \quad \mathsf{in} \quad \mathsf{Finland} \quad \mathsf{with} \quad \mathsf{Nordic} \quad \mathsf{Data} \quad \mathsf{Grid} \quad \mathsf{Constant} \quad \mathsf$ 

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, myql)

System Working knowledge of Unix, Linux(System administration)

System Experiences of Linux clustering

Programming Extensive use of ROOT, HTML, Labview and Latex

Programming Extensive use of python for Machine learning development

Electronics Working knowledge of CAMAC and VME

## Research Interests

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

correlation and jets

QGP The properties of hot partonic matter( so called QGP(Quark Gluon Plasma) ) by using flow,

heavy flavour and jets

 ${\sf Data\ Analysis}\quad {\sf C} + +\ {\sf based\ large\ scale\ data\ analysis\ framework\ development\ and\ Grid\ Computing}$ 

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

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

## Hobbies

1998-2000, Hapkido, Seoul, Korea.

2009-2013, Hapkido, Jyvaskyla, Finland.

2014-current, Football, Komeetat, JJK 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.

## Presentations and Publications

at https://github.com/dongjokim/dongjokim.github.com