

Korea-CERN Theory Collaboration

Deog-Ki Hong (PNU, Korean Phys. Soc.)
17 October, 2011

Purpose of Theory Program

- Developing next-generation high-energy theorists
- Promoting theory collaborations with CERN and helping Korean theory community to participate in HEP frontier research at CERN

Structure of Program

- Korean Physical Society (via Particle Physics Division): Developing young scientists
- Team of researchers (7+1 Professors): collaborations

2011 Budget

- Total : 350M won
- Two Korean-CERN Fellows (Salary+Others):
280 M won (240K CHF)
- Sending two Graduate Students to CERN for
6 months = 40 M won
- Operational Expense: 5 M won
- Overhead to KPS: 15M won

Activities of 2011 (I): Fellows and Graduates

- The 2011 Korean CERN Fellow (Dr. Myeonghun Park) and two graduate students are well settled in at CERN, Kwangwoo Kim (Luescher) and Imtaek Jeon (Antoniadis/Lambert)
- We plan to award one Korea-CERN fellow (2012 non-membership fellow deadline is Dec. 6th, 2011)
- We plan to send two graduate students to CERN for six month, after the selection procedure. (Application due Feb. 29th, 2012)

Activities of 2011 (continued)

- We plan to continuously support the participation of Korean post-docs at CERN-TH Institutes.
- Our goal is to support 3-4 post-docs a year:
- None (2010) and one (Dr. S. Shin) this year.
- We need huge effort to promote this activity.



Korea-CERN fellow

- Announcement and Applications: Oct. 24 - Dec. 6
- Evaluation: Mid Dec. (committee is formed by KPS)
- On Dec. 16th we'll have 2nd committee meeting, chaired by KPS president
- A ranked list will be sent to CERN by Dec. 20.

| Year | Applicants | Korea-CERN fellow |
|------|------------|--|
| 2009 | 7 | Hyun Min Lee(2010. 1 -present) Chul Kim (2010. 2 -2011.1) at KIAS |
| 2010 | 17 | Jin Ouk Gong (2010. 10. - present) |
| 2011 | 18 | Myeong Hoon Park (2011.10 - present) |

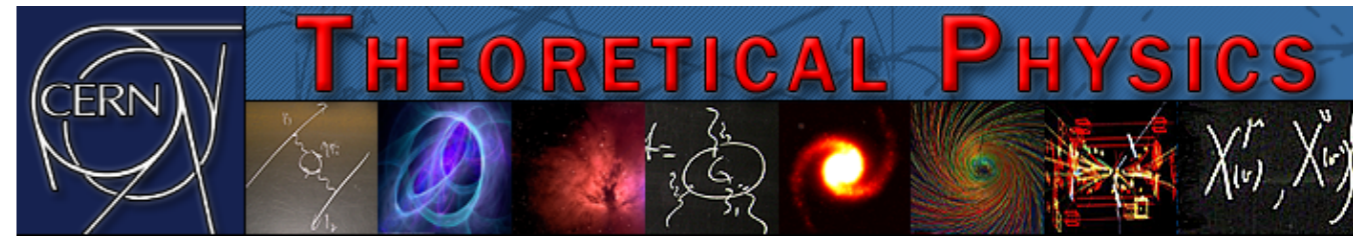
Graduate Students

- Announcement and Applications: Oct. 24, '11 – Feb. 29, '12
- A host professor at CERN should send a rec. lett.
- A committee is formed by KPS and decision will be made by mid. March.

| Year | Applicants | Selection |
|------|------------|--|
| 2010 | 2 | Jihun Kim (SNU, Giudice) -> Saclay Doyoun Kim (SNU Wiedemann) -> Monash U. in Aus |
| 2011 | 4 | Kwangwoo Kim (SNU, Luescher) Imtaek Jeon (Sogang, Antoniadis/Lambert) |

CERN THEORY INSTITUTE

- Support 3 -4 Korean Postdocs in Korea
- Apply directly to CERN
- CERN selects them



Today: [hep-th](#) [hep-ph](#) [astro-ph](#) [hep-lat](#) [seminars](#)

TH-DIVISION

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PEOPLE

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SEMINARS ETC

TH seminars
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PUBLICATIONS

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COMPUTING

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OTHER

job database
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CERN THEORY INSTITUTE

PROGRAMS IN 2011

See the links for the individual programs for more information, and in particular how to apply.

Dark Matter underground and in the heavens - DMUH11

The institute aims at providing the participants with an opportunity to discuss the latest developments in the field of Dark Matter. The main goal is to assess critically what will be the state of the art at the end of the "first round of searches at the TeV scale (in mid-2011) and to plan the road along promising theoretical and phenomenological directions.

Dates: July 18 - July 29, 2011

Organizers: M.Cirelli, D.Hooper, S.Sarkar, P.Serpico, G.Servant, T.Schwetz, N.Weiner

TH-LPCC Summer Institute on LHC Physics - THLPCC11

This 5-week Institute is co-organized by CERN's Theory Group and by the LHC Physics Centre at CERN.

The first two weeks of the Institute will be focused on SM and QCD while the last three weeks will be devoted to BSM, with a special emphasis on model building during the first two, and on the status of the searches at the LHC in the last one.

Dates: Aug 1 - Sept 2, 2011

Organizers: S.Frixione, G.Giudice, C.Grojean, M.Mangano, G.Salam, P.Skands, G.Servant

Quantum Gravity: from UV to IR

The goal of this TH Institute is to investigate problems associated with perturbative and nonperturbative gravity, particularly in the context of scattering, black holes, and

2012년도



「유럽핵입자물리연구소(CERN) 협력사업」 이론물리 공동연구 사업 공고

한국물리학회는 교육과학기술부 「CERN협력사업」의 세부사업인 2012년 '이론물리 공동연구사업'의 주관기관으로 Fellow 및 대학원생 파견과 CERN Theory Institute 참가지원을 아래와 공고합니다.

Fellow

- 파견기관: 유럽핵입자물리연구소(CERN), 스위스 제네바
- 파견기간: 2012. 09. 10~2014. 08. 31(2년, 근무사직일 조정 가능)
- 선발규모: 1인
- 지원방법: CERN에 직접 지원함과 동시에 연구책임자에게 이력서 및 발표논문 목록을 보내기 바람
- 지원마감: 2011. 12. 06

대학원생

- 파견기관: 유럽핵입자물리연구소(CERN), 스위스 제네바
- 파견기간: 2012. 05. 01~2013. 04. 30 기간 중 6개월(파견사직일 조정 가능)
- 선발규모: 2인
- 지원방법: 이메일 또는 우편으로 연구책임자에게 접수
- 지원마감: 2012. 02. 29

CERN Theory Institute 참가지원

- 선발규모: 3~4인(예산범위 내)
- 지원방법: CERN에 직접 수시 지원

연구책임자 **홍덕기**(부산대학교 물리학과, E-mail : dkhong@pusan.ac.kr)

주소: 609-735, 부산광역시 금정구 장전동 산 30 (부산대학교 물리학과)

주관기관: 한국물리학회

문의처: 연구책임자

※ 기타 자세한 내용은 한국물리학회 홈페이지 [학술행사란](#) 참조

게시판

- 공지사항
- 학술행사 안내
- 학회활동 문의
- 제79회 정기총회 평가 및 의견 율리기
- 자유게시판
- KPS Forum
- 물리 Q&A
- 홍보잡지 편집위원회
- 새물리편집위원회
- 물리교육위원회
- JKPS편집위원회
- 물리교과과정개선연구소위원회
- 과학기술 정책 제안 게시판
- CAP편집위원회
- 회원동정
- JKPS 발간 공지
- CAP 발간 공지
- 새물리 발간 공지
- (신)구인안내

학술행사 - 보기

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|-----|---|----|-----|
| 제목 | 2011년도 「유럽핵입자물리연구소(CERN) 협력사업」의 이론물리 공동연구 Fellow 파견 선발 공고 | | |
| 작성자 | 사무국 | | |
| 작성일 | 2010-10-25 오전 9:03 | 조회 | 827 |
| | 내용 | | |

교육과학기술부 공고 제2010-371호

2011년도 「유럽핵입자물리연구소(CERN) 협력사업」의 이론물리 공동연구 Fellow 파견 선발 공고

교육과학기술부에서는 「유럽핵입자물리연구소(CERN; European Organization for Nuclear Research) 협력사업」의 세부사업인 2011년 '이론물리 공동연구사업' Fellow 파견프로그램을 아래와 같이 공고하오니 관심 있는 분께서는 신청하여 주시기 바랍니다.

2010년 10월25일
교육과학기술부 장관

1. 사업목적

- CERN과의 협력 분야를 기존 실험분야에서 이론까지 확대함으로써, 이론 및 실험 분야의 균형발전 지원
- CERN의 우수한 연구진과의 직접교류 및 학술활동을 통해 세계적인 물리학자 및 엔지니어 양성·배출 기회 확보

2. 사업내용

- 파견기간: 2011.9.1~2013.8.31 (2년, 근무사직일 조정 가능)
- 파견기관: 유럽핵입자물리연구소(CERN), 스위스 제네바
- 지원규모: 체제비, 연금, 의료보험 및 기타 모든 혜택은 CERN Fellow와 동등하며 CERN의 기준을 따름

3. 신청자격 및 방법

- 신청자격: 고에너지 이론물리학 분야에서 박사학위 취득 후 10년이 경과하지 않은 자
- 선발규모: 1인
- 제출서류: (모두 영문으로) 이력서, 발표논문 목록, 추천서 3부
- 지원방법: CERN에 직접 지원함과 동시에 이메일 또는 우편으로 아래의 연구책임자에게 이력서 및 발표논문 목록을 보내시기 바람
 - 이메일: dkhong@pusan.ac.kr
 - 우편주소: (609-735) 부산광역시 금정구 장전동 산 30
부산대학교 물리학과 홍덕기
 - CERN에 지원시 CERN 홈페이지 참조

2012 Plan

- 2013 program will be announced in September 2012 via MEST and also KPS
- Application and selection will be done by Dec. for fellows and by March for grad. students
- CERN Theory Institute Participation by Korean postdocs. Special efforts are needed to increase no. of participations.
- Workshop at PNU or elsewhere in December
- We need to support the 3rd year of Fellow, when CERN supports the half of the expense.

2012 Budget Plan: 420M won

- Two Korean-CERN fellows: 280M won
- The half of third year for fellow: 70M won
- Scholarship for graduate students: 20M won
x two person = 40M won
- Local support for Theory Institutes
participation = 10M won
- Operational expense: 5M won
- Overhead (KPS): 15M won

Conclusion and Outlook

- Theory collaboration is running well.
- The selection process is well formatted and now becomes routine, though needs careful monitoring.
- How to promote further the collaboration?
- Next year is the fourth year of collaboration. We need to evaluate the collaboration of last three year and upgrade it.

Thank You

Merci

감사합니다