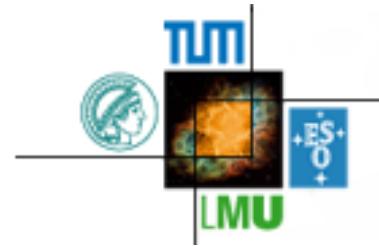


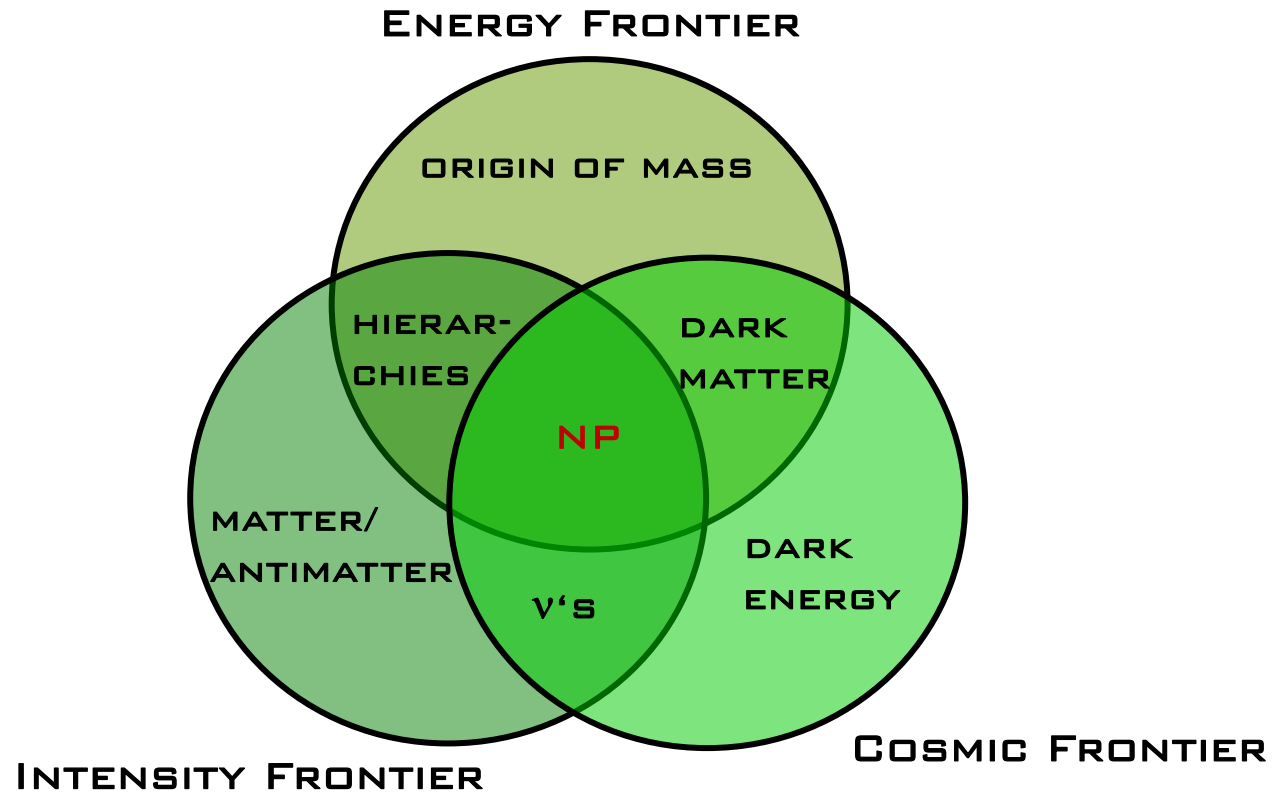
*MUNICH INSTITUTE FOR ASTRO- AND PARTICLE-PHYSICS*  
*PROF. DR. MARTIN BENEKE*  
*PROF. DR. ROLF KUDRITZKI*  
*DIRECTORS*

Excellence Cluster Universe

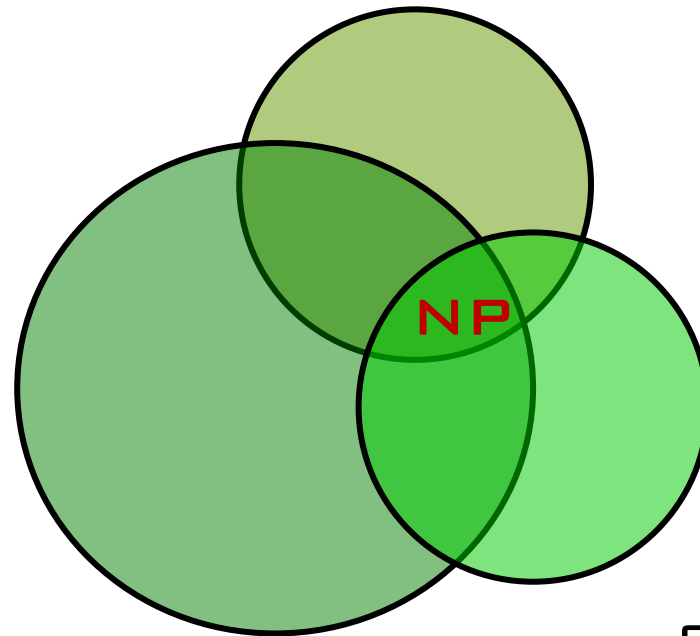


*FLAVOUR PHYSICS WITH HIGH-LUMINOSITY EXPERIMENTS*  
*OCT 24 – NOV 18*  
*M. CIUCHINI, P. KRIZAN, T. MANNEL, S. PAUL, B. GOLOB*

TRIPLE APPROACH



ENERGY FRONTIER



INTENSITY FRONTIER

COSMIC FRONTIER

FOCUSING ON INTENSITY FRONTIER (& NOT FORGETTING ABOUT THE OVERLAP)

FACING NEW ERA (LHCb, BELLE II, ...)

EXPERIMENT / THEORY COOPERATION

## QUESTIONS

- WHICH SENSITIVITY CAN BE REACHED FOR RARE AND DECAYS FORBIDDEN IN THE STANDARD MODEL WITH DATA SETS AS LARGE AS TENS OF INVERSE ATTOBARNs?
- HOW CAN THEORETICAL UNCERTAINTIES BE FURTHER REDUCED TO MATCH THE EXPERIMENTAL PRECISION?
- HOW CAN OBSERVABLES BE OPTIMIZED TO GUARANTEE MAXIMAL SENSITIVITY?
- CAN NEW ANALYSIS METHODS BE DEFINED WHICH MATCH TO NEW THEORETICAL IDEAS?
- HOW CAN SUCH A LARGE DATA SAMPLE BE USED TO REFINE THEORETICAL INPUT?
- HOW CAN THE COMPLEMENTARITY AMONG VARIOUS EXPERIMENTS BE USED MOST EFFICIENTLY?
- HOW DOES PRECISION FLAVOUR PHYSICS COMPARE TO OTHER DIRECT AND INDIRECT SEARCHES IN VIEW OF NEW PHYSICS AND ALIKE?

## FORMAT

RELATIVELY LONG PERIOD OF STAY FOR INDIVIDUAL PARTICIPANTS;  
WORK & DISCUSSIONS;

### **MORNING DISCUSSION SESSION 10:00-12:00**

CONVENERS APPOINTED; PROGRAM WITHIN THE SUBJECT IN THEIR HANDS (KEY PARTICIPANTS, MINI-SEMINARS, BLACKBOARD DISCUSSION, ...)

MINUTES ON THE SUBJECTS AND ISSUES BEING DISCUSSED, AND POSSIBLY ON IDEAS BEING PUT FORWARD DURING THE SESSIONS.

### **AFTERNOON SEMINAR 15:00-16:30**

SPEAKERS APPOINTED; 45 - 60 MINS LONG, EXPECTED TO INCLUDE AN OVERVIEW OF THE CURRENT STATUS AS WELL AS THE EXPECTATIONS FOR THE FUTURE.

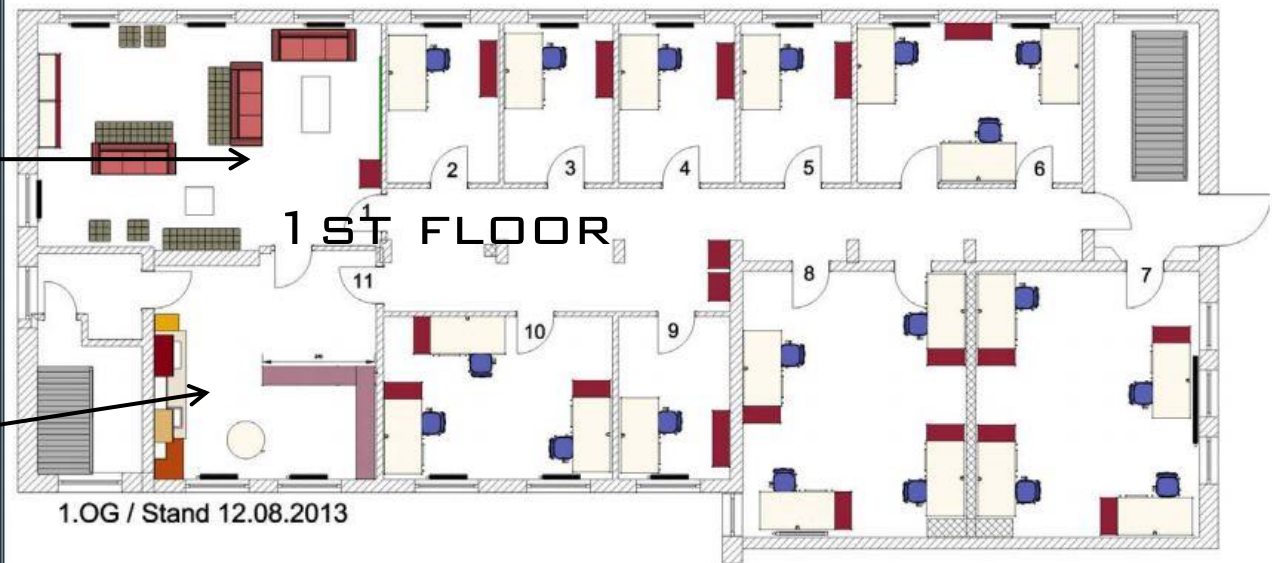
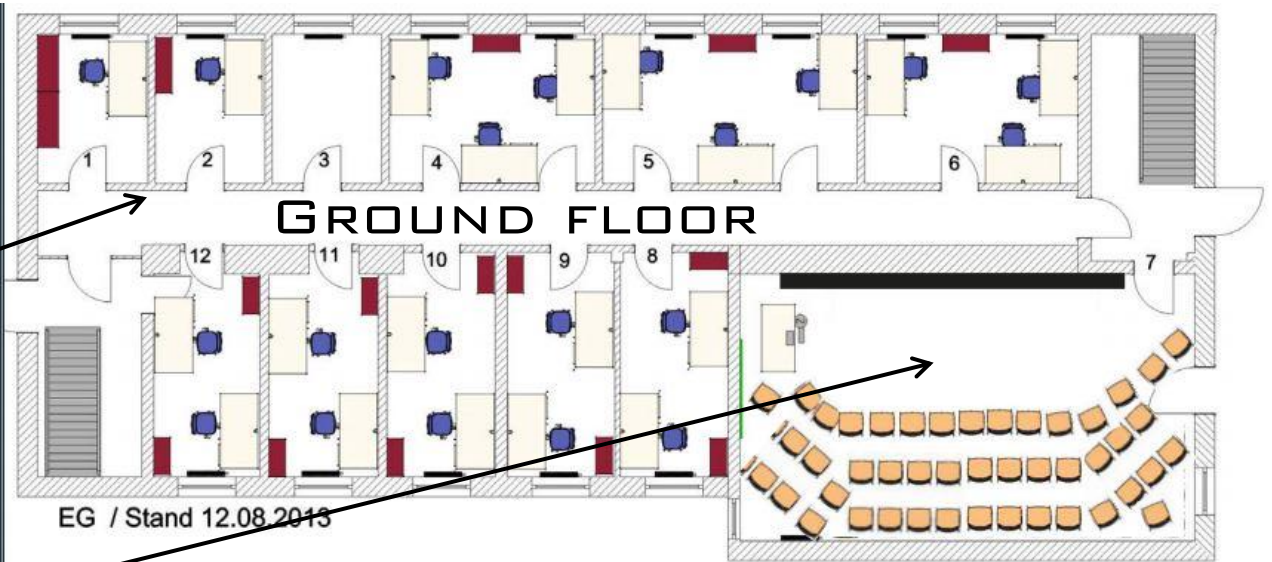
FLOOR PLAN

ANNOUNCEMENT  
TABLE (DAILY  
PROGRAM, DESK  
ASSIGNMENTS,  
OTHER NOTICES)

WE'RE HERE

PLACE FOR  
MORNING (AND  
LATER)  
DISCUSSIONS

COFFEE



## 1 ST WEEK PROGRAM

		AFTERNOON		MORNING	
		SEMINAR		DISCUSSION SESSION	
DAY		SUBJECT	SPEAKER	SUBJECT	CONVENER
MON	24.10.	BELLE 2 - INTRODUCTION	B. GOLOB	INTRODUCTION	B. GOLOB, T. MANNEL
TUE	25.10.			RARE B DECAYS: SM vs NP	D. STRAUB
WEN	26.10.	TCPV IN RADIATIVE DECAYS	L. LIGIOI	CPV IN B SYSTEM	A. LENZ
THU	27.10.	REPORT FROM B2TIP	E. KOU	3-BODY CHARMLESS B DECAYS	M. PENNINGTON
FRI	28.10.	RARE AND FORBIDDEN B DECAYS	J. RADEMACKE R	ANGULAR OBSERVABLES	R. SINHA

FOR REST OF THE WORKSHOP THE MOST RECENT VERSION CN BE FOUND AT  
<http://www.munich-iapp.de/scientific-programme/programmes-2016/flavour-physics/daily-schedule/?L=%2Fproc%2Fself%2Fenviron>

SATTELITES

WORKSHOP

MON	7.11.2 015	SYMMETRIES IN LOW AND HIGH ENERGY PHYSICS			SATTELITE
TUE	8.11.2 015	DIRECT CPV IN B DECAYS	P. GOLDENZW EIG		WORKSHOP

B2TIP

TUE	15.11.2 015	TOPICAL WORKSHOP		TOPICAL WORKSHOP	OPEN
WEN	16.11.2 015	"BELLE 2 PHYSICS WHITE BOOK"	OPEN	"BELLE 2 PHYSICS WHITE BOOK"	
THU	17.11.2 015				



**OTHER ORGANIZATIONAL INFO:**

WIFI:  
EDUROAM WORKS, INSTRUCTIONS FOR OTHER WIFI IN  
THE MATERIAL YOU'VE RECEIVED;  
FOR SKYPE CONNECTIONS PLEASE USE *MIAPP-GUEST*

PLACE TO DEPOSIT / DOWNLOAD SLIDES, MINUTES, ETC.:  
INDICO PAGE WILL BE SETUP TODAY (WELL, PERHAPS  
TOMORROW....)

REIMBURSEMENT:  
PLEASE HAND IN THE REIMBURSEMENT FORMS A.S.A.P.!

BUILDING: OPEN 7:00- 20:00;  
NOV 1ST PUBLIC HOLIDAY; ENTRANCE OK (USE BADGE!);  
CANTEEN CLOSED

OTHER  
ORGANIZATIONAL  
INFO:  
EXTREMELY  
HELPFUL MIAPP  
STAFF



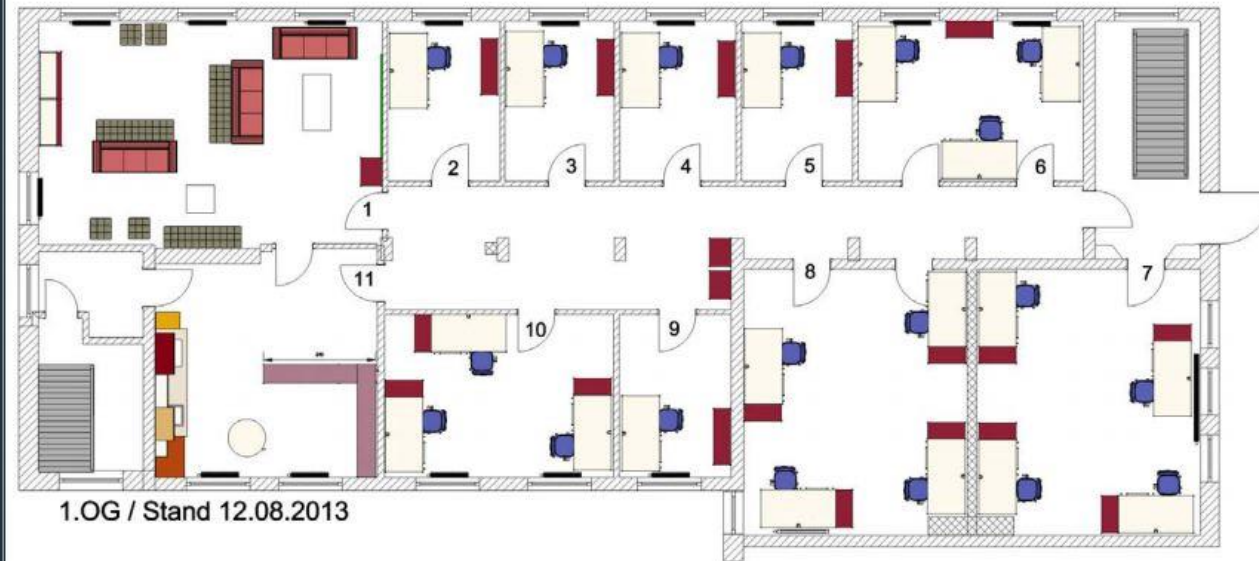
DR. INA  
HANEBURGER



SUSANN  
BLAUWITZ



THERESA  
KÄMPER



## MICHAEL E. PESKIN, FINAL SPEECH OF LEPTON PHOTON 2011

M.E. PESKIN, ARXIV:1110.3805

IF THE HIGGS BOSON MASS IS ABOVE THE LEP LOWER BOUND OF 114 GEV AND BELOW THE UPPER LIMIT FROM THE LHC ... THE STANDARD MODEL IS SELF-CONSISTENT UP TO VERY HIGH ENERGIES, ALL THE WAY TO THE PLANCK SCALE. THUS, A POSSIBLE OUTCOME OF THE LHC EXPERIMENTS COULD BE THE END OF EXPERIMENTAL PARTICLE PHYSICS.

...

THIS WOULD LEAVE US IN A TERRIBLE SITUATION. ALL OF THE QUESTIONS THAT WE HAVE TODAY ABOUT THE PROPERTIES OF PARTICLES WITHIN THE STANDARD MODEL WOULD NOT ONLY BE LEFT UNANSWERED BUT WOULD BE UNANSWERABLE.

...

THOSE WHO CHOOSE TO BELIEVE THAT THE STANDARD MODEL IS LITERALLY TRUE SHOULD UNDERSTAND THAT THIS IS WHAT THEY ARE BUYING.

....

THERE IS AN ALTERNATIVE POINT OF VIEW.

....

THAT POINT OF VIEW IS THE OPTIMISM THAT THE PHYSICS OF THE HIGGS FIELD AND ELECTROWEAK SYMMETRY BREAKING HAS A MECHANISM, ... ONLY PEOPLE WHO BELIEVE IN IT CAN MAKE THE DISCOVERY THAT IT IS TRUE.