

Research Area 2

Decays of bottom, charm, and strange quarks

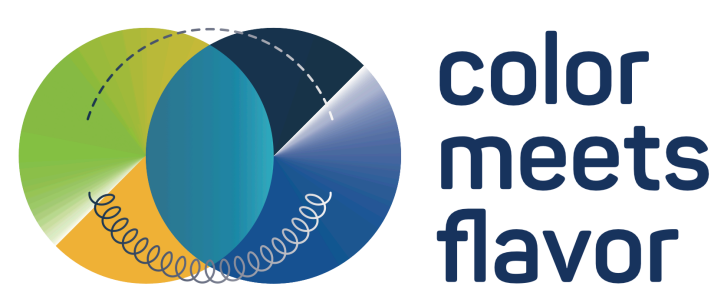
Kick-Off Meeting

October 23rd, 2025

Sally Stefkova

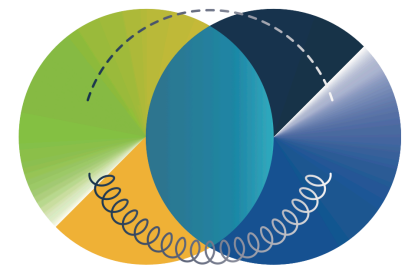
Thomas Mannel





Welcome to the RA2 Kick-off Meeting
Great to see many of you here in
person



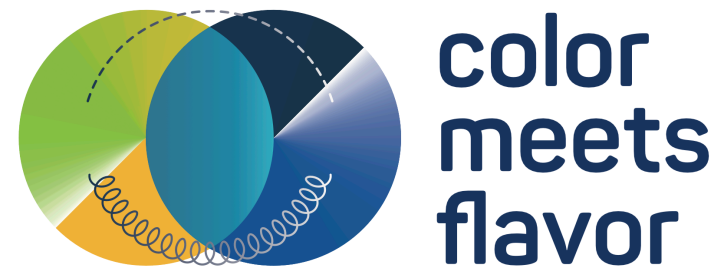


color
meets
flavor

Today's Program

- Please deposit your slides in <https://uni-bonn.sciebo.de/s/aByTZjpBaGMPeee>

Color Meets Flavour: RA2 Kick-Off meeting		
Thursday 23 Oct 2025, 09:30 → 16:00 Europe/Berlin		
0.052 (FTD)		
Description: First meeting of Research Area 2 of CMF: Decays of bottom, charm, and strange quarks		
For online participants, zoom coordinates are as follows: https://uni-bonn.zoom-x.de/j/61696806325?pwd=ST1kkUJpXAerdCPSV4TPzIEiOKw1Sx.1		
For all presenters, please upload your slides beforehand to with your name and topic in the title: https://uni-bonn.sciebo.de/s/aByTZjpBaGMPeee		
10:00	10:10	RA2 Welcome Speakers: Slavomira Stefkova (Bonn), Thomas Mannel
10:10	10:25	CPV in B → K π π and analytic structure of B → K II form factors Speaker: Bastian Kubis
10:25	10:40	A closer look at charm loops in hadronic B decays Speaker: Christoph Hanhart
10:40	10:50	Activities from LHCb Dortmund (Johannes) Speaker: Johannes Albrecht
10:50	11:20	Discussion on the structures of cross-functional teams in RA2
11:20	11:35	Experimental Activities Charm Flavour Speaker: Dominik Mitzel
11:35	11:50	Rare charm decays as flavor probes Speaker: Gudrun Hiller
11:50	12:05	Rare beauty and charm decays with missing energy Speaker: Slavomira Stefkova (Bonn)
12:05	13:05	Lunch
13:05	13:15	Exclusive Vub measurements Speaker: Jochen Dingfelder (University of Bonn)
13:15	13:30	Semi-inclusive hadronic systems Speakers: Markus Prim (BELLE (BELLE II Experiment)), Thomas Mannel
13:30	13:45	Lattice: excl. SL decays, mixing lifetimes for heavy mesons Speaker: Oliver Witzel
13:45	14:15	Discussion on Communication Channels for RA2
14:15	14:30	Inclusive semileptonic decays of heavy mesons from lattice QCD Speaker: Marko Garofalo
14:30	14:45	Global WET Fits across experiments Speaker: Florian Bembocher (Belle (SuperKEKB Experiment))
14:45	15:00	Lambda b → p K gamma (with RA1) Speaker: Sebastian Neubert
15:00	16:00	Other Presentations + Cross-functional Teams of RA2



Research Area 2

Reminder

Key Researchers

Albrecht, Bell, Bernlochner, Dingfelder, Feldmann, Hanhart, Hiller, Huber, Kilian, Kubis, Lenz, Mannel, Meißner, Mitzel, Prim, Stamou, Stefkova, Witzel

Coop. Partners

Humair, Jüttner, Ligeti, Peláez, Schune, Urquijo, Vos, Wilkinson

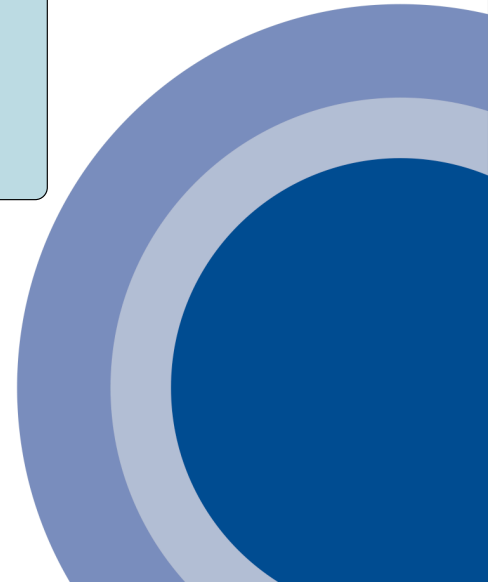
Objectives

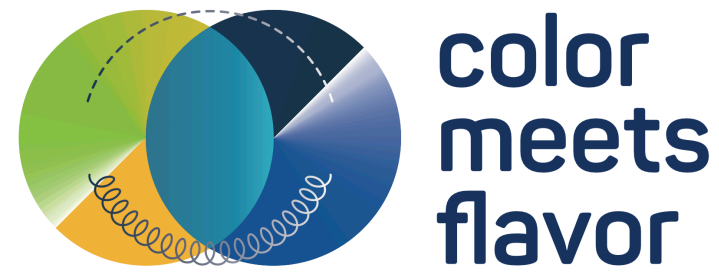
- Search for new phenomena in weak decays, in close collaboration with hadronic structure investigations in RA1.
- Clarify the origin of the flavor anomalies.
- Combine theoretical and experimental efforts for stringent tests of the SM to identify new phenomena in bottom and charm decays.

Cluster Professors

W2 Flavor Physics at LHCb (EXP)
W3 BSM Phenomenology (TH), together with RA3

with work program divided into 7 areas...



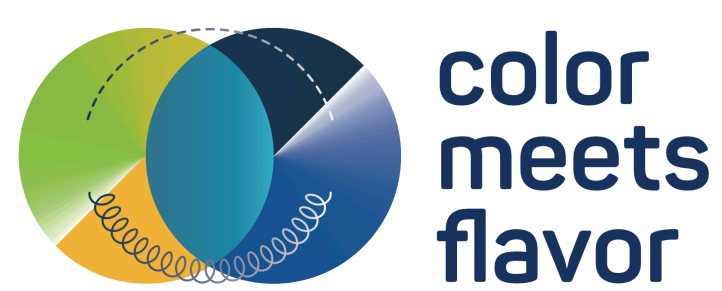


Overall Work Program

From the application:

- Anomalies 1: Lepton Flavor Universality in CC decays
- Anomalies 2: Rates and Angular Distributions In FCNC decays
- Anomalies 3: Inclusive vs. Exclusive
- Mixing, Lifetimes and CPV in Bottom Hadrons
- Hadronic Decays of Bottom Hadrons
- Charm- and Strange-Quark Physics: CP violation, mixing, rare decays
- QED Radiative Corrections





Goals of the Kick-off Meeting

1. Discuss the overall work program in RA2

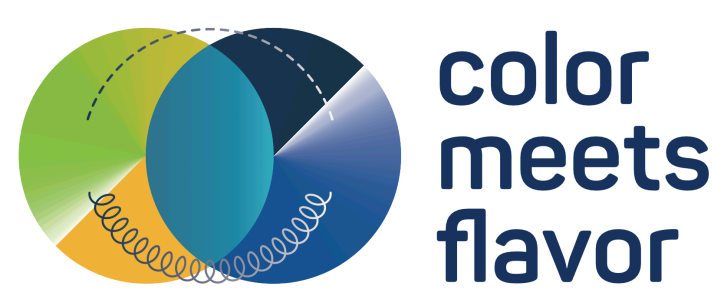
- Identify current and future projects

2. Discuss the cross-functional teams for the projects

- Discuss the format of the cross functional teams
- Discuss the complementarity to other RA, TA
- Set up the first round of cross functional teams

3. Discuss communication platform for RA2





Goals of the Kick-off Meeting

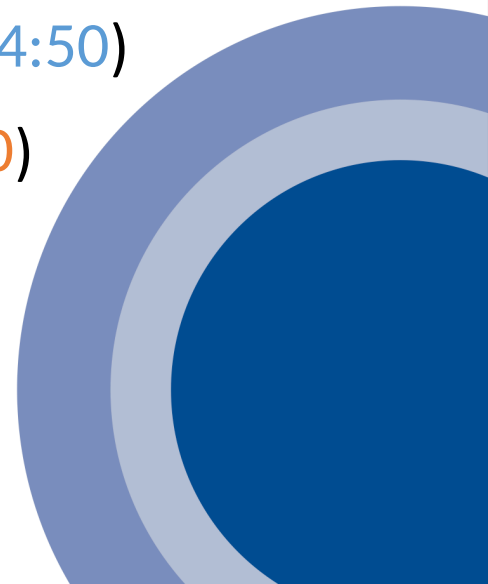
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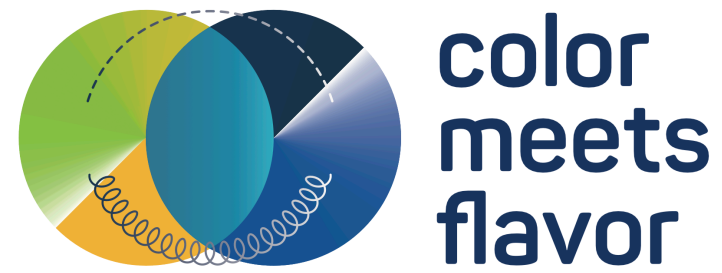
- Identify current and future projects (all day + discussion starting at 14:50)

2. Discuss the cross-functional teams for the projects

- Discuss the format of the cross functional teams (discussion starting at 10:50)
- Discuss the complementarity to other RA, TA (discussion starting at 10:50)
- Set up the first round of cross functional teams (discussion starting at 14:50)

3. Discuss communication platform for RA2 (discussion starting at 13:50)



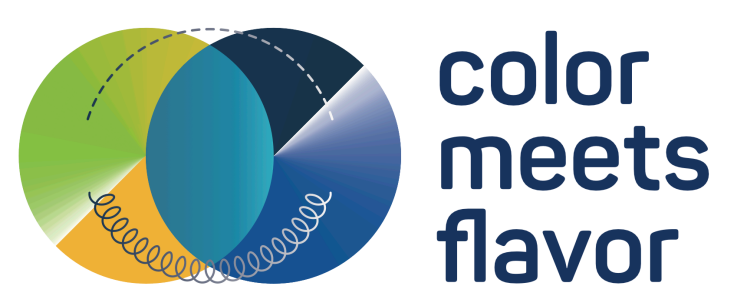


Overall Program

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Backup

