



11th International Workshop on the CKM Unitarity Triangle (CKM 2021)

Phillip Urquijo The University of Melbourne Welcome and Introduction





Acknowledgement of Country

We acknowledge the elders, and descendants of the Wurundjeri people who have been and are the custodians of these lands. We acknowledge that the land on which we meet was the place of age-old ceremonies, of celebration, initiation and renewal, and that the local Aboriginal peoples have had and continue to have a unique role in the life of these lands.











November 22 - November 26, The University of Melbourne Website/Registration https://indico.cern.ch/event/891123/

CKW 5057



l Advisory Committee Changzhen Yuan Chris Parkes Svetlana Fajfer Christine Davies Cristina Lazzeroni Sharam Rahatlou Elisabetta Barberio Marina Artuso Andreas Kronfeld Gagan Mohanty Monina Pepe-Altarelli Toru Iijima Achille Stocchi Alan Schwartz Alan Schwartz Paolo Gambino

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Virtual Welcome to Melbourne/Naarm



CKM 2021

Melbourne Exhibition Building



Virtual Welcome to Melbourne/Naarm







CKM 2021





The University of Melbourne Campus







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The University of Melbourne

- Students **54 000+**
- International Students **44%** from **155** countries
- Undergraduate **51%**, Postgraduate **49%**
- Total personnel **9200** (**4800** academic)
- Research expenditure second only to CSIRO, with over **100** research centres and institutes
- Ranked **#1** in Australia, **#33** in the world by THE



Helen Quinn



Richard Dalitz

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- SABRE Nal(TI) (flagship) experiment to be assembled and commissioned in 2022.





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School of Physics – Stawell Underground Physics Lab

First deep underground (1025m) physics laboratory in the Southern Hemisphere. Completion early 2022.





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益川 敏英, MASUKAWA Toshihide, 7 February 1940 – 23 July 2021



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Sheldon Stone, 14 February 1946 – 6 October 2021







CKM Working Groups

WG1: Vud, Vus, Vcd, Vcs and semileptonic/leptonic D decays

Lei Li (BIPT) Emilie Passemar (Indiana University) Martin Gonzalez-Alonso (University of Valencia)

WG2: Vub, Vcb and semileptonic/leptonic B decays including T

Racha Cheaib (DESY) Mark Smith (Imperial College London) Alejandro Vaquero (The University of Utah)

WG3: Rare B, D and K decays, radiative and electroweak penguin decays, including constraints on Vtd/Vts and ε'/ε

Diego Guadagnoli (LAPTH Annecy) Christoph Langenbruch (RWTH Aachen) Elisa Manoni (INFN Perugia)

WG4: Mixing and mixing-related CP violation in B system: Δm , $\Delta \Gamma$, ϕs , $\phi 1/\beta, \phi 2/\alpha, \phi 3/\gamma$

Veronika Chobanova (University of Santiago de Compostela) Matthew Wingate (University of Cambridge) Yosuke Yusa (Niigata University)

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WG5: Direct CP violation (DCPV) including $\phi 3/\gamma$ from $B \rightarrow DK$, **DCPV** effects, branching fractions and polarisation in charmless B(s) decays

Joachim Brod (University of Cincinnati) Resmi PK (CPPM Marseille) Wenbin Qian (University of Chinese Academy of Sciences)

WG6: High-pT flavor physics: $H \rightarrow f'f$ decays, single top production, direct measurement of Vtd, Vts, Vtb, rare top decays, CPV at high pT

Matthias Komm (CERN) Umberto De Sanctis (University of Roma Tor Vergata)

WG7: Mixing and CP violation in the D system: xD, yD, |q/p|D, ϕD , **DCPV in D decays**

Cheng-Wei Chang (National Taiwan University) Adam Davis (University of Manchester)





Zoom, Talk uploads, Proceedings

Zoom

All Zoom Rooms: <u>https://indico.cern.ch/event/891123/page/23717-zoom</u>

Talks

have one <u>https://account.cern.ch/account/Externals/</u>.

Proceedings

- are invited to prepare proceedings (approx. 6 page limit for individual talks).
- As is customary for CKM workshops, the working group reports are intended to be reference documents for the field and are a focal point to record the results and discussions that take place at the workshop.
- Particle Physics (https://www.centredarkmatter.org).

• Upload talks prior to your session. Get a CERN (lightweight) account if you don't already

• They will be published with Proceedings of Science and will be open access. All speakers

The proceedings are sponsored by the Australian Research Council Centre for Dark Matter

