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- Talk by Claudia Cornella

- Try to account for the **present picture;**

- **Bottom-up** approach

  a. Fit the tension within **effective theories (model independent)**

  b. Build **simple model** (1 or 2 new particles) that reproduce the shift(s)

  c. (when possible) **Complete** the model with a full theory

  d. (always) Deduce new constraints

- **Example** with b $\rightarrow$ sl$^+$l$^-$ anomalies; shift in $C_{ql}^{(1)}$ and $C_{ql}^{(3)}$; U1 leptoquark

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- Talk by Héctor Gisbert

- **Goldmine for new physics**: SM rates are tiny $\Rightarrow$ every signal is NP!

- **Lot of channels** with different experimental and theoretical attention:

  a. $c \rightarrow ul^+l^-$: Branching ratios, Angular Analyses, LF(U)V...

  b. $c \rightarrow u\nu\nu$: Branching ratios

  c. $c \rightarrow u\gamma$:   Branching ratios, CP asymmetry...

- These channels can be **theoretically related**: any limit on the dineutrino mode provides useful information on e.g. the LFV leptonic mode!

Theory summary:

- 3 talks: **New Physics modeling, Charm physics** and <mark>**Dark Matter searches**</mark>;

- [Talk by Elias Bernreuther](#)

- Thermal relic puts portal-DM models **within reach of Belle 2!**

- **Different mediators ⇒ different channels**

  a. **Scalar**: B → K + two charged tracks

  b. **ALP**: ee → γa(→γγ) or B → Ka(→γγ)

  c. **Vector**: ee → $\chi_1\chi_2(\to\chi_1$+two charged tracks)

  d. **QCD-like**: dark shower = multiple displaced vertices

- Most of these decays can **only be measured at Belle 2!**