Measuring γ in $B^{\pm} \rightarrow (K^+K^-\pi^+\pi^-)_D K^{\pm}$ decays

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Outline

- Introduction
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- Using chemistry packages with LATEX
 - Chemical equations with mhchem
- Where to go next...

Introduction

- In these slides we show how Overleaf can be used with standard chemistry packages to easily create professional presentations.
- If you're new to LATEX, check out this free introductory course by Overleaf founder Dr John Lees-Miller: www.overleaf.com/blog/7
- You can also find more quick tips and tricks on the help pages at www.overleaf.com/help

The chemistry packages

We focus on two LATEX chemistry packages:

The chemfig package

This package provides the command which draws molecules. Created by Christian Tellechea, a detailed user guide can be found here:

www.tex.ac.uk/ctan/macros/generic/chemfig/chemfig_doc_en.pdf

The mhchem package

The mhchem package provides simple commands for typesetting chemical molecular formulae and equations. Created by Martin Hensel, a detailed user guide can be found here:

http://mirror.ox.ac.uk/sites/ctan.org/macros/latex/contrib/mhchem.pdf

Chemical equations with mhchem

- The mhchem package lets you write chemical equations in LATEX with the minimum of effort.
- The example below shows how the standard representation of a reaction (on the left) is created from the simple code on the right:

$$CO_2 + C \longrightarrow 2 CO$$
 is created with $ce\{CO2 + C \rightarrow 2CO\}$

• More complicated reactions are still easy to write:

$$SO_4^{2-} + Ba^{2+} \longrightarrow BaSO_4 \downarrow$$
 is created with $ce{SO4^2- + Ba^2+ -> BaSO4 v}$

Where to go next...

- This short example was designed to introduce you to using Overleaf for scientific presentations.
- This is made possible by the many great packages that have been developed for LATEX, including the two we focused on here (plus the Beamer package used for the overall presentation style).
- For more help on using LATEX, see the links on the Overleaf help page: www.overleaf.com/help or check out our free introductory course: www.overleaf.com/blog/7.

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Happy LATEXing!