CP VIOLATION AND B PHYSICS

University of London intercollegiate postgraduate course in Elementary Particle Physics

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Introduction

- Contact details.
 - Via email: m.bona@qmul.ac.uk
- Course structure.
- Suggested reading.
- Assessment.

Marcella Bona

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- Contact details.
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 - 3 lectures.
 - Lecture 1: Introductory material.
 - Lecture 2: The B-factories.
 - Lecture 3: LHC and future B physics experiments.
 - 1 problem sheet.
- Suggested reading.
- Assessment.

SUGGESTED READING

- Bigi and Sanda, "CP Violation", Cambridge University Press (2000).
 Currently out of print.
- Branco, Lavora and Silva, "CP Violation", Oxford University Press (1999).
- SLAC Summer Institute (Stanford 1999)
 - http://www.slac.stanford.edu/gen/meeting/ssi/1999/school_prog.html
- International School on CP violation and heavy quark physics (Rostock 2003)
 - http://topas.physik2.uni-rostock.de/prerow2003/
- Recent papers related to the subject.
- Helmholtz Summer School Lectures on B-Physics available at:
 - http://www.ph.qmul.ac.uk/~bevan/
 (Lecture 1: angles of the Unitarity Triangle, Lecture 2: ΔS and direct CP violation).
- Theory chapter of my thesis:
 - http://pprc.qmul.ac.uk/~bona/ulpg/cpv/first.pdf

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 - Homework sheet distributed in 3rd lecture.
 - Exam questions (January exams)