DESY Seminar

Tuesday, 26.02.2008, 17h

DESY Hörsaal

Electroweak Pengiun Decays of B Mesons

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Electroweak penguin decays of B mesons are b→s or b→d transitions with a lepton pair or photon in the final state. Within the Standard Model, these flavor-changing neutral current processes are forbidden at tree level and proceed predominantly through one-loop "penguin" diagrams. Virtual new particles entering the loop would contribute at leading order, possibly altering decay rates and asymmetries in a measurable way. Thus, the study of electroweak penguin decays of B mesons can yield powerful New Physics constraints, which are likely to remain highly relevant in the LHC era. In this seminar I will review the experimental methods and results of recent measurements of these decays at the B factories, in particular with the BaBar detector at the SLAC PEP-II collider.

- **Tea and cookies will be served at 16.45h in the lobby**
- **After the seminar there is a chance for private discussions with the speaker over wine and pretzels**