

博士論文公聴会の公示（物理学専攻）

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論文題目：Right-handed charged current in $b \rightarrow u$ transition
（ $b \rightarrow u$ 遷移における右巻き荷電カレント）

日時：2016年2月4日（木）13:00 - 14:30

場所：理学研究科 H 棟 7 階セミナー室 A (H701 号室)

主査：細谷 裕

副査：大野木哲也、山中 卓、山口 哲、田中 実

論文要旨：

Right-handed charged current in $b \rightarrow u$ transition has been considered in order to explain the discrepancy among $|V_{ub}|$ measurements in several B meson decay modes. We study this problem with the most recent experimental data. As a result, we find that a large CP violation in the $b \rightarrow u$ right-handed charged current is suggested. Accordingly we study possible CP violating signals in $B \rightarrow \pi\pi$, $\rho_L\rho_L$ and DK decays. We obtain constraints from the present experimental data and present future prospects. The scenario of the $b \rightarrow u$ right-handed charged current is consistent with the present data and new CP violating signals in the above decay modes might be discovered in future experiments.