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Unconventional D-branes on T⁴

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We show that apart from the conventional Dp-branes and their supersymmetric bound states, the weakly coupled type II superstring compactified on a 4-torus admits new stable non-BPS fundamental D-branes. We construct the corresponding elementary superconformal boundary states at special values of closed string moduli for which the worldsheet theory admits a Gepner-like description and check a number of BCFT consistency conditions. The open string spectrum of these new non-BPS D-branes is tachyon free despite the fact that they carry no RR charges. New explicit superconformal boundary states for certain 1/4-BPS bound states of Dp-branes are also found.

Presenter: VOSMERA, Jakub **Session Classification:** Talks