

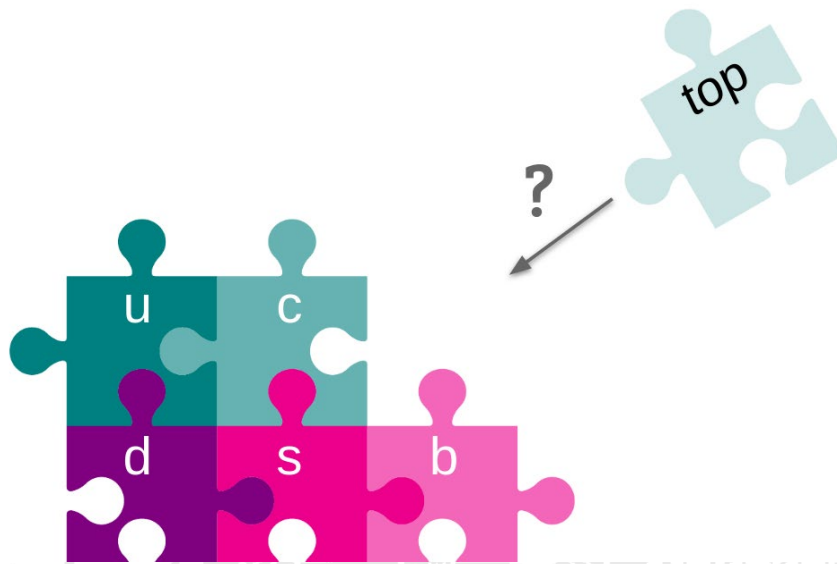
PHYSIKALISCHES KOLLOQUIUM

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IM GROßEN HÖRSAAL

AKTUELLE INFORMATIONEN FINDEN SIE HIER:

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THE TOP QUARK: ONCE A MISSING PUZZLE PIECE, NOW THE KEY TO (ALMOST) EVERYTHING

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While the existence of the top quark is a known fact today, we can only access it since a relatively short time. After the discovery of the b-quark in the 1970ies, a discovery of its weak-isospin partner was expected to happen in the following years. Due to the unique properties of the top quark however, it took almost twenty years until it was finally found. In this lecture we will discuss how to find the top quark and how to measure these unique properties. Furthermore it will be shown how the top quark can be used as a laboratory to understand other physics phenomena and search for rare processes both in and beyond the Standard Model of particle physics.