Institut für Didaktik der Mathematik und Physik

Fakultät für Mathematik und Physik

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Einladung zum khdm-Kolloquium

Am **Donnerstag, den 28. Mai 2015, ab 16.00 Uhr,** spricht im
Raum F142 der Leibniz Universität Hannover

Corine Castela, Université Paris Diderot
Laboratoire de Didactique André Revuz

zum Thema

"When praxeologies move from an institution to another one: an epistemological approach of boundary crossing"

Abstract:

The issue of vocational mathematics education is commonly approached through a vigotskian lens focusing on the individual development within different socio-cultural contexts (see Educational Studies in Mathematics 86): how does one student tackle the experience of crossing boundaries between mathematics, engineering sciences, workshop units, vocational training? In my presentation, I will take the opposite yet complementary point of view of the anthropological theory of the didactic, which insists on the social and institutional dimensions. Drawing on the notion of praxeology as a general model for socially-acknowledged cognitive resources of institutions, the issue I want to address is epistemological: how do mathematical praxeologies transform when they cross institutional boundaries? I will present personal development I give to Chevallard's description of a praxeology in order to account for the diversity of knowledge produced by non mathematics institutions using mathematics. What types of needs does this knowledge intend to satisfy? This model encompasses the multi-institutional legitimating processes into play in the boundaries crossing. To exemplify both the praxeological model and the inter-institutional transpositive effects on praxeologies, I will look at examples from mathematics and automatic control. At last, I intend to show that this model is relevant for other scientific fields as well as vocational contexts, even with very low academic knowledge needs.

Vor dem Vortrag wird ab 15.30 Uhr im **Raum F407 Kaffee und Tee** gereicht. Auch dazu ergeht hiermit eine herzliche Einladung.