Technische Universität Wien
Institut für Diskrete Mathematik und Geometrie

# Einladung

zu einem

## Vortrag

von

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Title: Hermite interpolation by hypocycloids and epicycloids with rational offsets

Abstract:
Hypo/epicycloids (shortly HE-cycloids) are well-known curves, in detail
studied in classical geometry. Hence, one may wonder what new can be said
about these traditional geometric objects. It has been proved recently that
all rational HE-cycloids are curves with rational offsets, i.e., they
belong to the class of rational Pythagorean hodograph curves. In this talk,
we present an algorithm for $G^1$ Hermite interpolation with hypo/epicycloidal
arcs which results from their support function representation. We prove
that for all regular data, there is a unique interpolating hypocycloidal or
epicycloidal arc of the given canonical type.

**Zeit:** Mittwoch, 12.5.2010, 16.00 Uhr
**Ort:** Dissertantenraum des Instituts für Geometrie
Wiedner Hauptstraße 8-10, 8. Stock, Turm A (grün)

H.Stachel