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Technische Universität Berlin

Fakultät V – Institut für Mechanik

Lehrstuhl für Kontinuumsmechanik und Materialtheorie (LKM)

Sekr. MS 2, Einsteinufer 5, 10587 Berlin

Ankündigung eines Gastvortrages

im Rahmen des Mechanik Seminars

zum Thema

Description of liquid–gas phase transition in the frame of continuum mechanics

Ort: **Technische Universität Berlin, Gebäude MS,
Raum MS 107
Mittwoch, 29. Oktober 2014, 16:15 Uhr**

Gastdozent:

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Abstract:

A new method of describing the liquid–gas phase transition is presented. It is assumed that the phase transition is characterized by a significant change of the particle density distribution as a result of energy supply at the boiling point that leads to structural changes but not to heating. Structural changes are described by an additional state characteristics of the system—the distribution density of the particles which is presented by an independent balance equation. The mathematical treatment is based on a special form of the internal energy and a source term in the particle balance equation. The presented method allows to model continua which have different specific heat capacities in liquid and in gas state.