

**Folder: CbKST-WORKSHOP\_Wuhan 2013**

**File: CbKST-WS\_WebIntro\_Wuhan 2013 FINAL**

## **Advances in Behavioral Sciences in the Internet Age: Selected Topics in Mathematical Psychology**

Scientific Organizer: Xiangen Hu - Central China Normal University - Wuhan – China - June 27<sup>th</sup> 2013

### **Workshop on ‘Knowledge & Competence/Skill Spaces and their Applications’**

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#### **PART 1**

Introduction and Overview: Dietrich Albert

#### **PART 3**

Recent Applications: Dietrich Albert

## **WEB-BASED INTRODUCTIONS INTO KST AND CbKST (Status of June 2013)**

**In the following Web-based introductions on (Competence-based) Knowledge Spaces, in terms of (a) **Competence-based Knowledge Space Theory (CbKST) Training Course** and (b) **Introduction to Knowledge Spaces: Theory and Applications - ODL Course** are listed.**

Starting with Knowledge Space Theory (KST) introduced by Doignon and Falmagne, the theory was extended by bringing into the picture the underlying skills and capabilities that are relevant to solving the problems. The theoretical results on the extended framework are due to Doignon, Duentsch and Gediga, Korossy and others. The basic idea of Competence-based Knowledge Space Theory (CbKST) is to identify the competences and skills that are sufficient for solving each of the considered problems. For each subset of skills, on the other hand, an individual may be equipped with the set of problems that can be solved and is uniquely defined. This subset of problems constitutes a possible knowledge state, and their collection forms a knowledge structure. KST and CbKST form the basis for adaptive and personalized (a) assessment of competences and skills as well as (b) teaching and learning. The training course and a web-based introduction into KST and CbKST with exercises and examples may be Your basis for continued self-regulated learning.

## **Competence-based Knowledge Space Theory (CbKST) - Training Course**

### ◆ [Competence-based Knowledge Space Theory \(CbKST\) Training Course](#)

A training course which provides an introduction to Competence-based Knowledge Space Theory (CbKST). The course contains explanations, diagrams, examples, and a set of test items.

<http://css.uni-graz.at/projects/CbKSTCourse/release/>

With Test Items/Exercises.

## **Introduction to Knowledge Spaces: Theory and Applications - ODL Course**

### ◆ [Introduction to Knowledge Spaces: Theory and Applications](#)

An Open Distance Learning (ODL) course supported by the SOKRATES/ERASMUS CDA subprogramme of the European Commission.

[http://wundt.kfunigraz.ac.at/MathPsych/cda/overview\\_sokrates.htm](http://wundt.kfunigraz.ac.at/MathPsych/cda/overview_sokrates.htm)

With Examples