UNIVERSITÄT PADERBORN
Die Universität der Informationsgesellschaft

s-lab
Software Quality Lab

s-lab –
Software Quality Lab
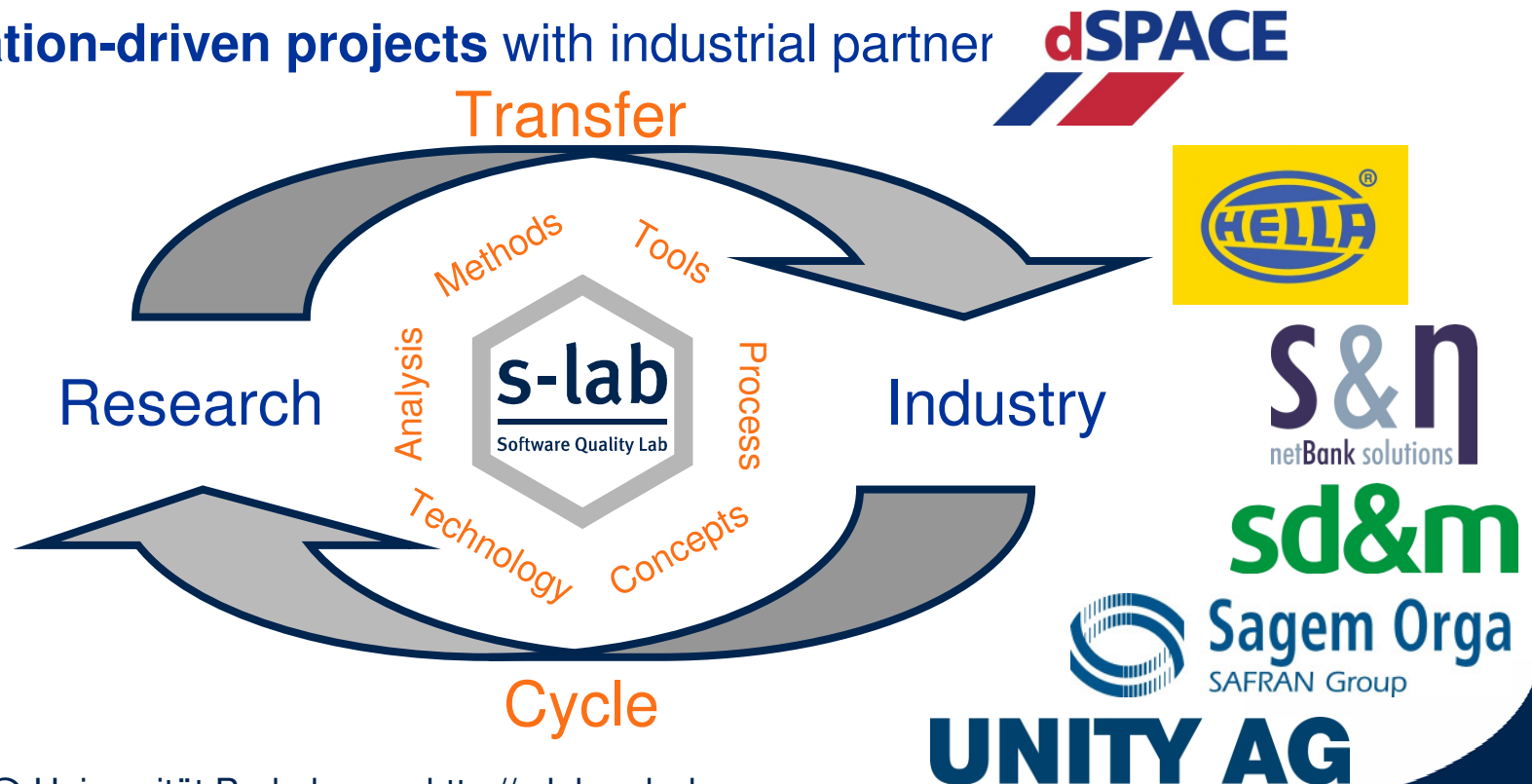# at the University of
Paderborn

Stefan Sauer

April 7, 2006

http://s-lab.upb.de

s-lab – Software Quality Lab

- Open **private-public partnership** with currently 6 industrial partners
- Objective: improvement of quality, efficiency and innovative ability in **industrial software development**
- **Mutual transfer of expertise and technology** in the domains of software engineering & software quality
- **application-driven projects** with industrial partner

s-lab Mission Statement

The **Software Quality Lab** (s-lab) is an institute for **technology transfer** and a **competence center for software engineering**. In s-lab, **partners from industrial software development** closely cooperate with **research groups** of the University of Paderborn.

Work in s-lab is centered upon development and evaluation of constructive and analytical **methods and tools of software engineering** for obtaining **high-quality software**.

High relevance for industrial software development and the need for **employing scientific methods** characterize the problems that are dealt with in s-lab.

Tasks and Objectives of s-lab

development and improvement of software engineering **methods, concepts, techniques, languages, and tools**, with emphasis on **software quality assurance**

definition and execution of both domain-specific and interdisciplinary **projects**, especially **in cooperation with industrial partners**

consulting of application partners in the area of software engineering by means of **colloquia, workshops, seminars, and other advanced training activities**

Topics and Capabilities

Automotive Software

Web-based Systeme

. . .

Analysis
Diagnosis
Test

Software &
Process Quality

Models &
Architectures

s-lab
Software Quality Lab

Languages &
Platforms

Development Methods

Development Environments
& Tools

Members of s-lab & their Domains

Prof. Dr. Gregor Engels

Database & Information Systems

Prof. Dr. Uwe Kastens

Programming Languages & Compilers

Prof. Dr. Hans Kleine Büning

Knowledge-based Systems

Prof. Dr. Franz Josef Rammig

Design of Parallel Systems

Prof. Dr. Wilhelm Schäfer

Software Engineering

Associated Partners of s-lab

dSPACE

Sagem Orga
SAFRAN Group

HELLA
Ideen für das
Auto der Zukunft

s-lab
Software Quality Lab

sd&m

s&n
netBank solutions

UNIVERSITÄT PADERBORN
Die Universität der Informationsgesellschaft

UNITY AG

Some Projects

„Semantic Description of Enterprise Services – An Industrial Case-Study "

　　duration: 6 months, start: 08/2005

„Analysis of the Applicability of Model Checking Techniques in the Development of Automotive Systems"

　　duration: 10 months, start: 05/2005

„Software Quality Assurance in Automotive ECU Networks"

　　duration: 3 years, start: 11/2005