

An orange abstract graphic consisting of multiple overlapping, curved lines that form a complex, organic shape, resembling a stylized flower or a dynamic network structure. It is positioned on the left side of the top half of the slide.

FORSCHUNGSINITIATIVE
K O - F A S

Final Presentation Research Initiative Ko-FAS

Abschlusspräsentation Forschungsinitiative Ko-FAS

Supported by:



on the basis of a decision
by the German Bundestag



FORSCHUNGSINITIATIVE
K O - F A S

Research Initiative Ko-FAS

Die Forschungsinitiative Ko-FAS

Stephan Zecha
Continental Safety Engineering

Supported by:



on the basis of a decision
by the German Bundestag

Perspectives Road Safety

MITIGATION

AVOIDANCE

2013

t

TOUCHING



Passive Safety



VIEWING



Driver Assist



TALKING



C2C 1G



Cooperative technologies within research initiative Ko-FAS



- Goal: „Safety for All“ and „Accident-Free-Driving“ by using cooperative technologies
- Partner:



- Project schedule: 8/2009 – 6/2013 (11/2013)
- Research areas:

Cooperative localization:



Ko-TAG

Cooperative perception:



Ko-PER

Cooperative components



Ko-KOMP

The cooperative safety approach



FORSCHUNGSINITIATIVE
K O - F A S

Enabler
Technologies



ADAS

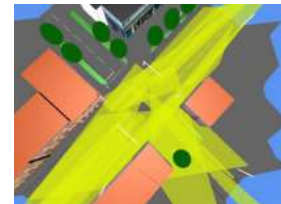
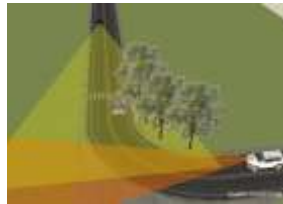


C2C 1G

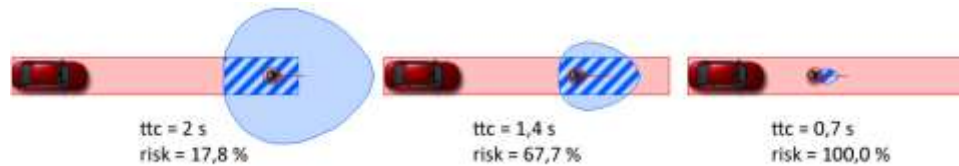


TAG

Seamless
Traffic
Surveillance



Situation
Analysis



Adapted
Preventive
Reaction



Guidance



Warning

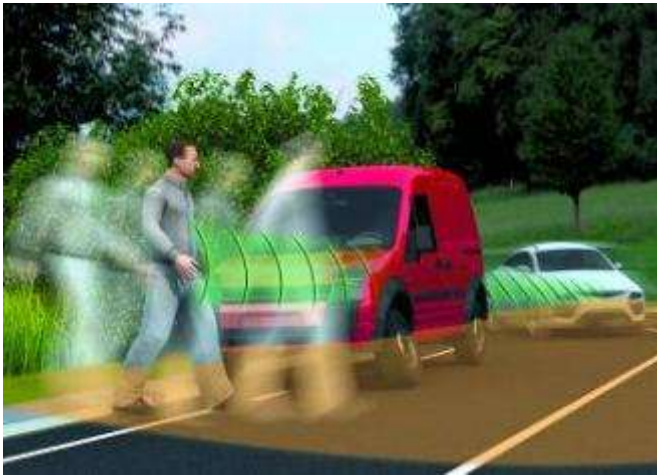


Autonomous
Intervention

Unique Selling Points Cooperative Transponders



Vulnerable Road User Protection



Cooperative transponders can

- Recognize traffic partners with highest reliability
- Locate VRUs without line-of-sight
- Classify by ID and motion characteristics
- Track objects chronologically

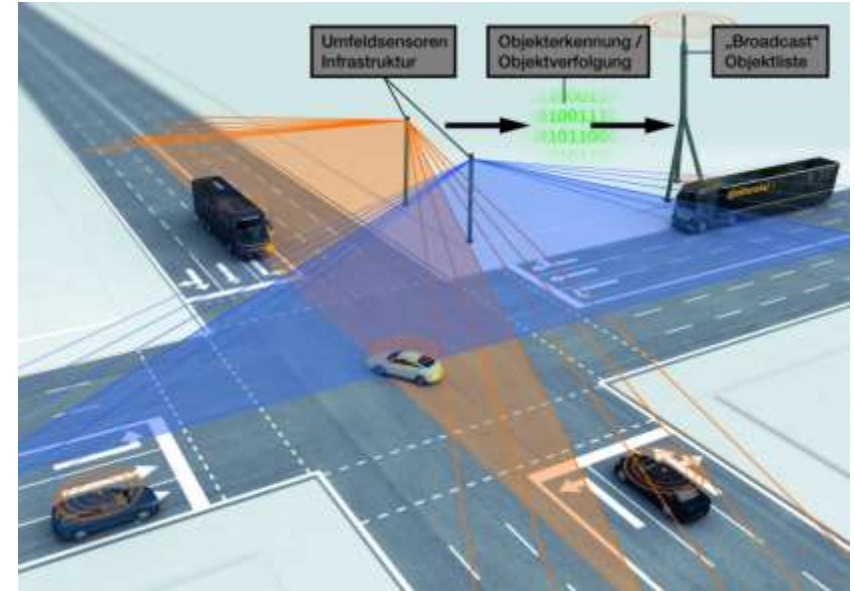
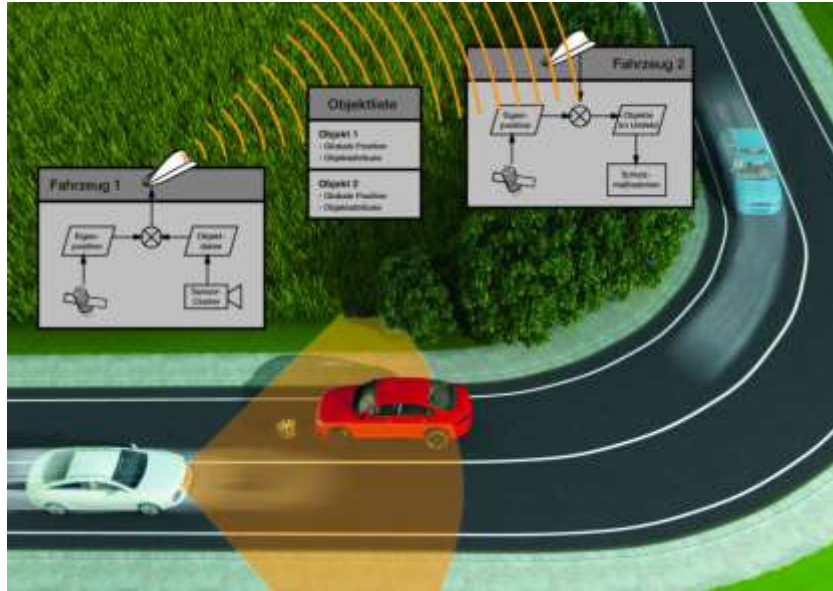
Omnidirectional safety



- Recognize objects with significant lateral offset due to large aperture angle

VRU: Vulnerable Road Users

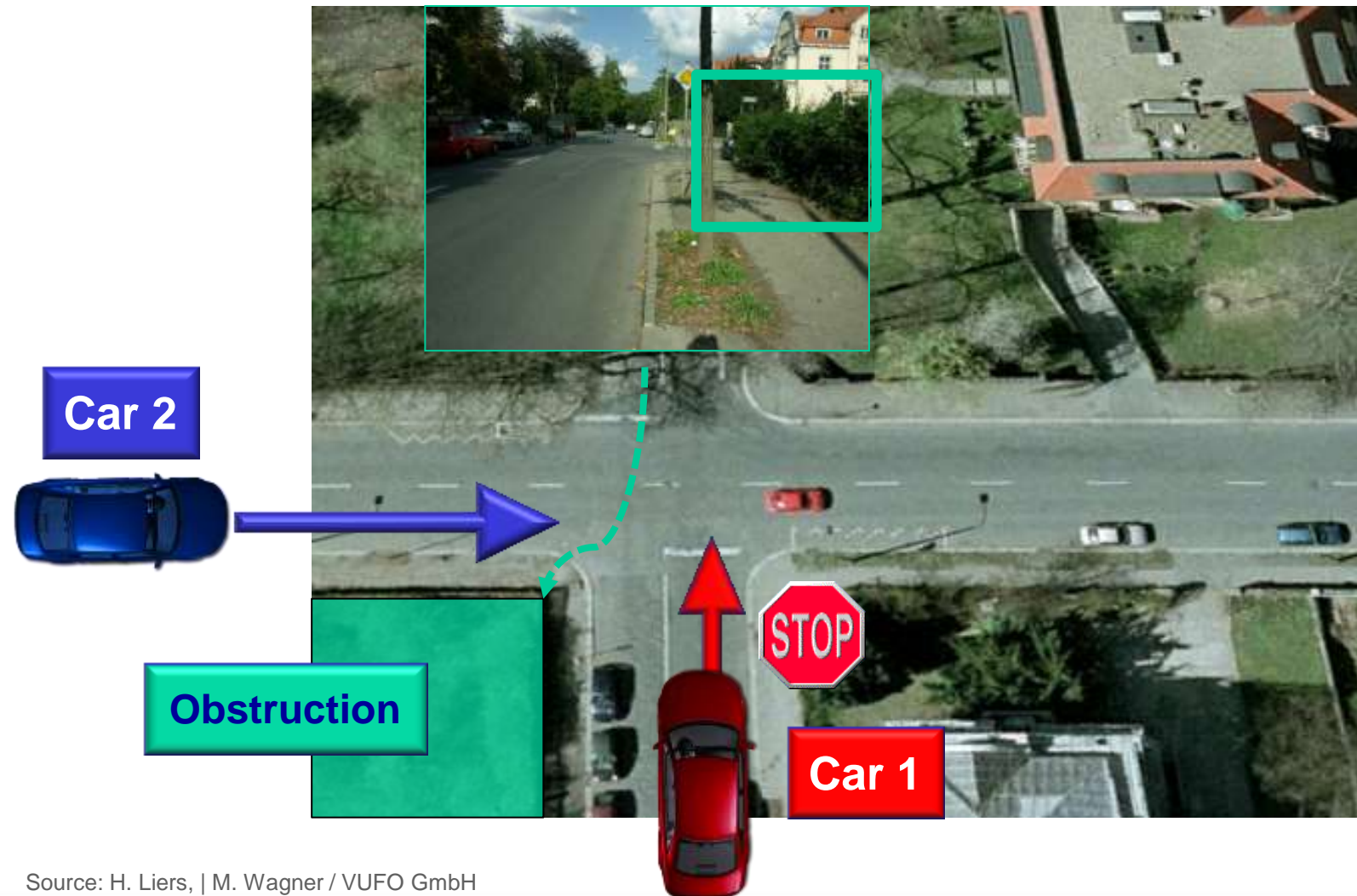
Unique Selling Points Cooperative Perception



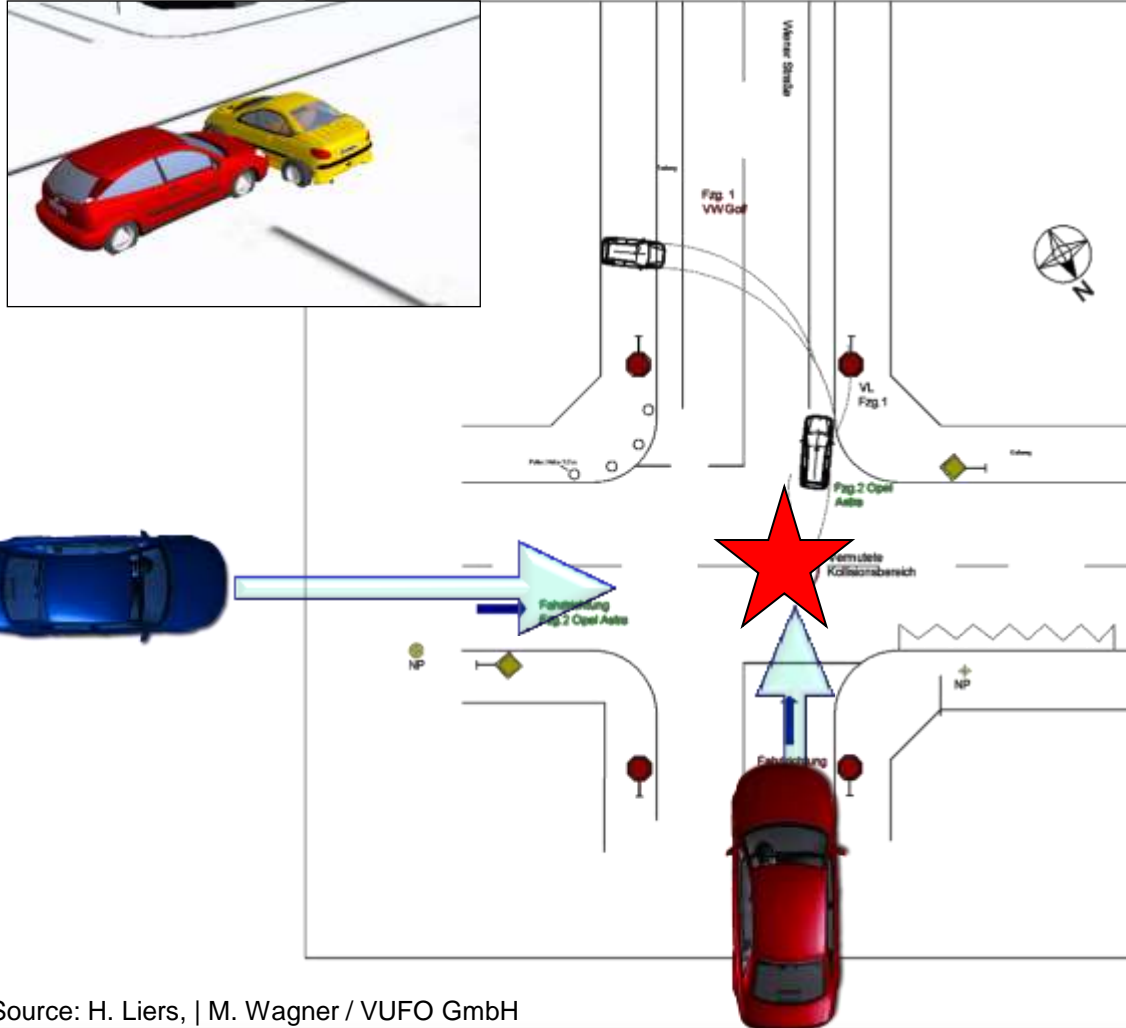
Cooperative perception

- Enables seamless traffic surveillance by using sensor fusion across vehicles
- Allows recognition of hidden traffic partners in unclear traffic situations
- Supports driver guidance through difficult traffic situations

Assessment of protection potential on individual accident basis



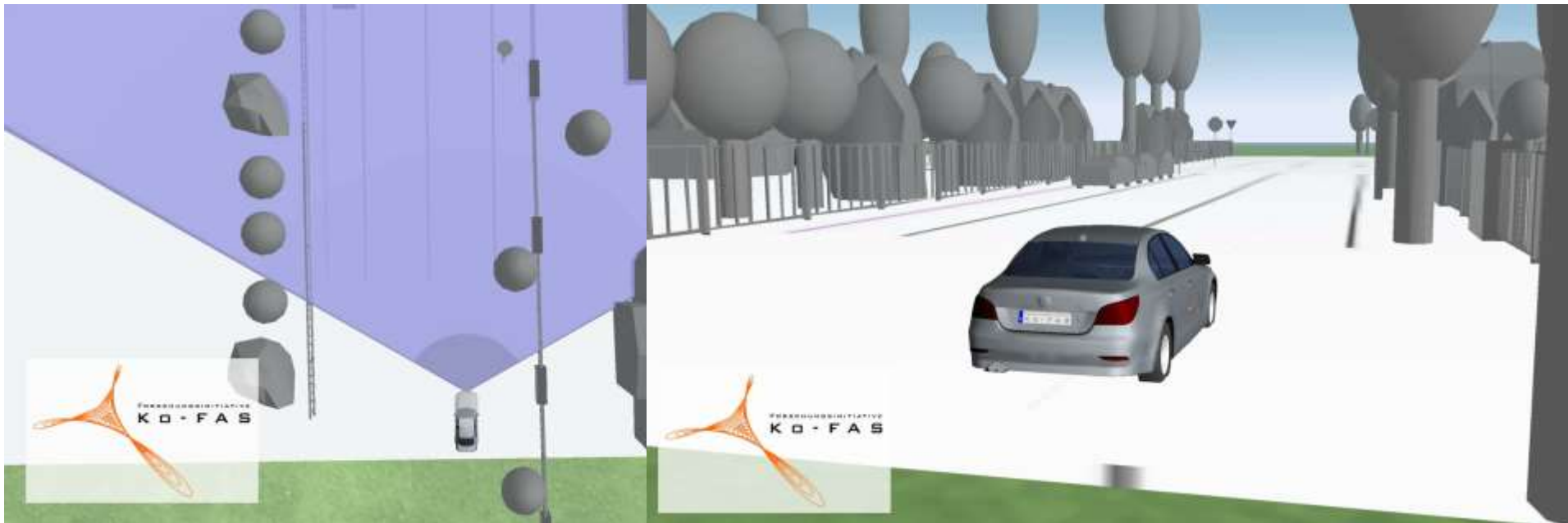
Accident situation: Sequence and consequences



Collision avoidance by using cooperative technologies



FORSCHUNGSINITIATIVE
K O - F A S



Herzliches Dankeschön – Special Thankyou



- BMWi for the initial trust and courage to start Ko-FAS and to fund the research initiative
- City of Aschaffenburg and especially to the senior mayor Klaus Herzog for their inconvenient and extraordinary support
- All partners within the research initiative for the tremendous engagement and the excellent results which had been achieved
- Industrial partner companies for the co-funding of their projects
- Steering committee, „Projektsprecher“ and the ZENTEC for the co-operative and friendly support

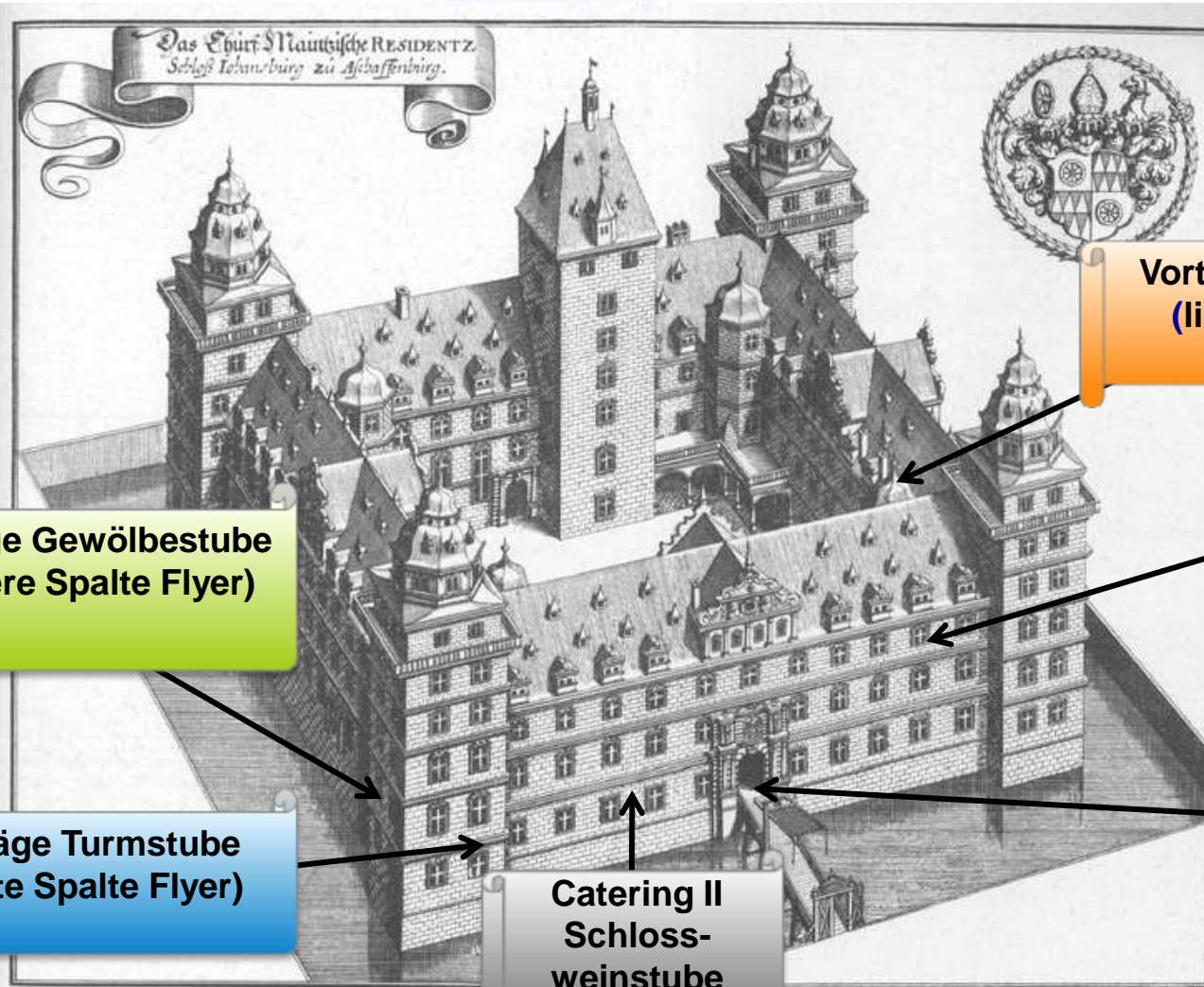
Schedule

Final Presentation 18.09.



Uhrzeit	Inhalt		
09.30 – 10.30	Eintreffen und Registrierung der Gäste		
10.30 – 10.40	Grußwort Oberbürgermeister Klaus Herzog		
10.40 – 11.00	Die Forschungsinitiative Ko-FAS Stephan Zecha, Koordinator		
11.00 – 11.30	Zielsetzung, Ergebnisse und Ausblick (je 10min.) Mark Schulte, Dr. Daniel Schwarz, Dr. Reiner Wertheimer		
11.30 – 12.50	Infrastrukturbasierte Perzeption und Informationskarten	Eigenlokalisierung und Kommunikation	Kooperative Transponderortung
12.50 – 14.00	Mittagessen		
14.00 – 15.20	Kooperative Perzeption und Situationsanalyse	Unfälle und Testumgebung für Fahrerassistenzsysteme	Kommunikationstechnologie für kooperative Ortung
15.20 – 16.00	Kaffeepause		
16.00 – 17.20	Situationsinterpretation und aktive Sicherheit / neuartige Fahrerinformationsansätze	Simulation und Wirksamkeit von Fahrerassistenzsystemen	Anwendungen kooperativer Ortung
17.20 – 18.00	Offene Fragerunde im Foyer (Koordinator und Projektsprecher)		

Floor plan Castle Johannsburg



Vorträge Ridinger Saal
(linke Spalte Flyer)

Vorträge Gewölbestube
(mittlere Spalte Flyer)

Catering I
Treppenhaus

Vorträge Turmstube
(rechte Spalte Flyer)

Catering II
Schloss-
weinstube

Eingang



FORSCHUNGSINITIATIVE
K O - F A S

Research Initiative Ko-FAS

Die Forschungsinitiative Ko-FAS

Stephan Zecha
Continental Safety Engineering

Supported by:



on the basis of a decision
by the German Bundestag