

VaMoS 2015

Program



**Ninth International Workshop on Variability
Modelling of Software-intensive Systems**

**January 21-23, 2015
Hildesheim, Germany**

www.vamos-workshop.net

Program Ninth VaMoS, January 21–23, 2015, Hildesheim, Germany

Welcome

We welcome you to VaMoS 2015, the 9th International Workshop on Variability Modelling of Software-intensive Systems. VaMoS always aimed to be a place where the newest developments in the area of variability can be shared and discussed. We are happy to host this event in 2015 at the University of Hildesheim, Germany, and thus continue this highly successful series.

The program of VaMoS adheres to the well established and successful scheme: we will have two keynote speakers: one from industry (Stefan Kuntz) and one from research (Jean-Marc Jézéquel). The main part of the program consists of selected high-quality papers (acceptance rate 47%).

For each paper a discussant has been assigned, but of course we are counting on everyone to contribute to the discussion. We hope you will take home a lot of new insights and ideas.

Once you visit the town, you will see that Hildesheim is a charming city with many nice spots. It has two UNESCO world heritage sites as well as a nice downtown area. As part of the social events we will visit some nice places, but there is more to see.

We hope you will experience VaMoS as an insightful event, and you will always remember it as a nice experience both from a research perspective as well as from the personal side.



Klaus Schmid
General Chair VaMoS 2015



Øystein Haugen
Program-Co-Chairs



Johannes Müller
Program-Co-Chairs

Workshop Organization

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Thorsten Weyer (*University of Duisburg-Essen, Germany*)

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Day 1 – Wednesday, January 21, 2015		
08:20	Transfer from Downtown Hildesheim (see “VaMoS Cab-Shuttle”, p. 13 for detailed information)	
08:30	Registration Opens	
09:00 – 09:15	Welcome & Opening Session The Organizers	
09:15 – 10:30 Keynote [Session Chair: Johannes Müller]	“Variability Modeling in the Automotive Domain” Stefan Kuntz	
10:30 – 11:00	Coffee Break	
11:00 – 12:30 Paper Session: [Session Chair: Christian Bucholdt] “Code Quality”	Presentation	Duration
	Code Smells Revisited: A Variability Perspective	25'
	Wolfram Fenske and Sandro Schulze	
	Discussion	20'
	[Discussants: Daniela Lettner]	
	Using Feature Feeds to Improve Developer Awareness in Software Ecosystem Evolution	25'
12:30 – 14:00	Daniela Lettner and Paul Grünbacher	
	Discussion	20'
	[Discussants: Wolfram Fenske]	
Lunch Break Restaurant “Landgasthof-Hotel – Zur scharfen Ecke” (see “VaMoS Workshop Location”, p. 11 for detailed information)		

14:00 – 15:30 Paper Session: [Session Chair: Rick Rabiser] “Documentation”	Presentation	Duration
	Documentation of Recovered Architecture for Variability in Legacy Generator Systems	25'
	Christian Bucholdt and Max Lillack	
	Discussion	20'
	[Discussants: Sebastian Krieter]	
	Use-Case-Specific Source-Code Documentation for Feature-Oriented Programming	25'
15:30 – 16:00	Sebastian Krieter, Reimar Schröter, Wolfram Fenske, and Gunter Saake	
	Discussion	20'
	[Discussants: Christian Bucholdt]	
	Coffee Break	
	Presentation	Duration
	Variability Management for a Runtime Monitoring Infrastructure	25'
16:00 – 17:30 Paper Session: [Session Chair: Mattias Nyberg] “Runtime”	Rick Rabiser, Michael Vierhauser and Paul Grünbacher	
	Discussion	20'
	[Discussants: Rafael Capilla]	
	Collaborative Context Features for Critical Systems	25'
	Rafael Capilla, Mike Hinchey and Francisco Diaz	
	Discussion	20'
	[Discussants: Rick Rabiser]	
17:45	Transfer to Downtown Hildesheim (see “VaMoS Cab-Shuttle”, p. 13 for detailed information)	
19:00	Social Event Tour in the “Roemer- und Pelizaeus-Museum” and welcome reception afterwards (same location) (see “Social Event Locations”, p. 10 for detailed information)	

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Day 2 – Thursday, January 22, 2015		
08:30	Transfer from Downtown Hildesheim (see “VaMoS Cab-Shuttle”, p. 13 for detailed information)	
9:00 – 10:30 Keynote [Session Chair: Øystein Haugen]	“Some Issues in Product Line Engineering of Language Families” Jean-Marc Jézéquel	
10:30 – 11:00	Coffee Break	
11:00 – 12:30 Paper Session: [Session Chair: Sandro Schulze] “Configuration”	Presentation	Duration
	Intelligent Techniques for Configuration Knowledge Evolution Alexander Felfernig, Stefan Reiterer, Martin Stettinger and Juha Tiihonen	25'
	Discussion [Discussants: Xavier Devroey]	20'
	Covering SPL Behaviour with Sampled Configurations: An Initial Assessment Xavier Devroey, Gilles Perrouin, Axel Legay, Pierre-Yves Schobbens and Patrick Heymans	25'
	Discussion [Discussants: Mustafa Özpınar]	20'
12:30 – 14:00	Lunch Break Restaurant “Landgasthof-Hotel – Zur scharfen Ecke” (see “VaMoS Workshop Location”, p. 11 for detailed information)	

14:00 – 15:30 Paper Session: [Session Chair: Gilles Perrouin] “Requirements”	Presentation	Duration
	Non-Functional Properties in Software Product Lines: A Reuse Approach Larissa Soares, Ivan Machado and Eduardo Almeida	25'
	Discussion [Discussants: Emanuel Mätzler]	20'
	A Common Home for Features and Requirements: Retrofitting the House of Quality with Feature Models Emanuel Mätzler, Bernhard Wally and Alexandra Mazak	25'
	Discussion [Discussants: Larissa Soares]	20'
15:30 – 16:00	Coffee Break	
16:00 – 17:30 Paper Session: [Session Chair: t.b.a.] “Verification”	Presentation	Duration
	A Survey on Modeling Techniques for Formal Behavioral Verification of Software Product Lines Fabian Benduhn, Thomas Thüm, Malte Lochau, Thomas Leich and Gunter Saake	25'
	Discussion [Discussants: Joyce El Haddad]	20'
	Managing the Variability in the Transactional Services Selection Nadia Gamez, Joyce El Haddad and Lidia Fuentes	25'
	Discussion [Discussants: Fabian Benduhn]	20'
17:45	Transfer to Downtown Hildesheim (see “VaMoS Cab-Shuttle”, p. 11 for detailed information)	
19:00	Social Event Dinner at the “Van der Valk Hotel” (see “Social Event Locations”, p. 10 for detailed information)	

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Day 3 – Friday, January 23, 2015		
08:30	Transfer from Downtown Hildesheim (see “VaMoS Cab-Shuttle”, p. 13 for detailed information)	
09:00 – 10:30 Paper Session: [Session Chair: Alexander Felfernig] “Reverse Engineering”	Presentation	Duration
	On the Variability Secrets of an Online Video Generator Guillaume Bécan, Mathieu Acher, Jean-Marc Jézéquel and Thomas Menguy	25'
	Discussion [Discussants: Jens Weber]	20'
	Uncovering Variability Models for Software Ecosystems from Multi-Repository Structures Jens Weber, Anita Katahoire, Morgan Price	25'
	Discussion [Discussants: Guillaume Bécan]	20'
10:30 – 11:00	Coffee Break	
11:00 – 12:30 Paper Session: [Session Chair: Rafael Capilla] “Comprehension”	Presentation	Duration
	Visualization of Variability in Complex Development Structures Jürgen Ommen and Georg Rock	25'
	Discussion [Discussants: Alexander Felfernig]	20'
	Towards Understanding Cognitive Aspects of Configuration Knowledge Formalization Alexander Felfernig, Stefan Reiterer, Martin Stettinger and Juha Tiihonen	25'
	Discussion [Discussants: Jürgen Ommen]	20'
12:30 – 12:45	Closing Session The Organizers	

Map of Hildesheim City Center & Social Event Locations

Social Event (Wednesday)

Roemer- und Pelizaeus-Museum

Am Steine 1
31134 Hildesheim

Website

<http://www.rpmuseum.de/english.html>

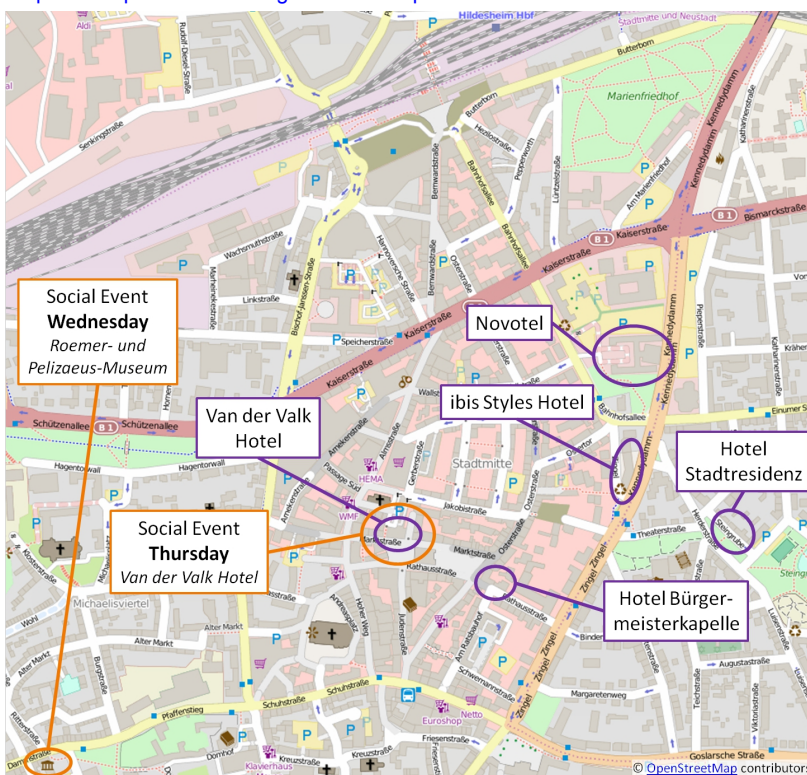
Social Event (Thursday)

Van der Valk Hotel

Markt 4 [GPS: Jakobistraße]
31134 Hildesheim

Website

<https://hildesheim.vandervalk.de/en>



The social events are located at the city center of Hildesheim. The events can be reached by foot in about 17 minutes (longest way from Novotel / Hotel Stadtresidenz to Roemer-Pelizaeus-Museum). **Both events start at 7pm.**

On Wednesday, the social event includes a **guided tour** in the *Roemer- und Pelizaeus-Museum* through one of the world's most famous collections of ancient Egyptian cultural monuments with outstanding treasures of the Old Kingdom from the age of great pyramids [<http://www.rpmuseum.de/english/egypt.html>].

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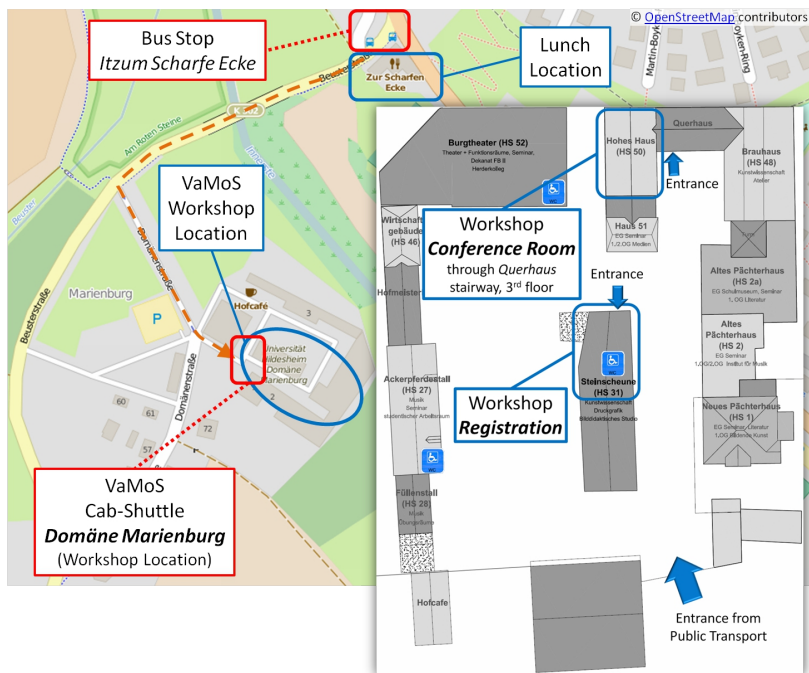
VaMoS Workshop Location: Domäne Marienburg

The VaMoS workshop is located at the *Domäne Marienburg*, one of the campuses of the *University of Hildesheim*:

Address: Domäne Marienburg
Domänenstraße
31141 Hildesheim

Using the **VaMoS cab-shuttle**, you will directly arrive at the workshop location.

Using **public transport**, you will arrive at *Itzum Scharfe Ecke* (see map below). From there workshop signs will guide you to the workshop location.



Lunch Breaks

The lunch will be served at the restaurant *Landgasthof-Hotel – Zur scharfen Ecke*. The restaurant can be reached by foot in about 5 minutes. The persons from the local organization team will guide you to the lunch location.

Wireless Network Access

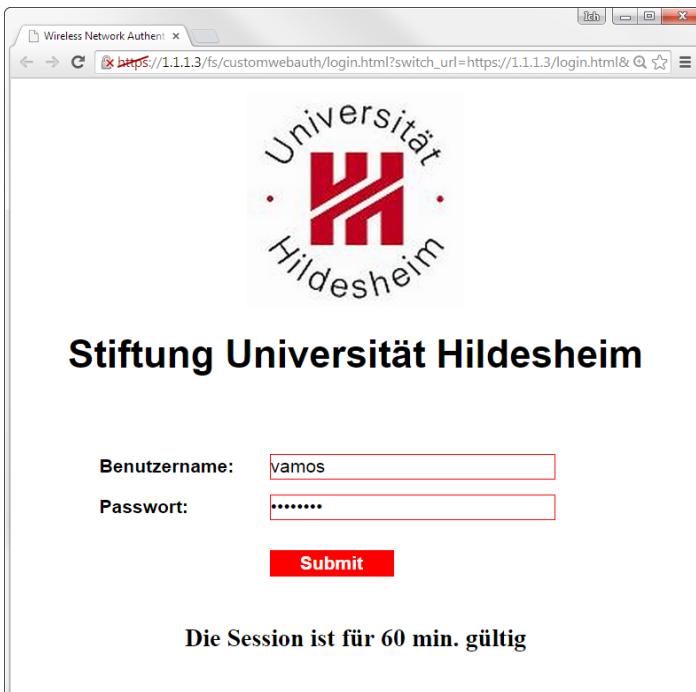
You can access *eduroam* in all areas of the workshop location.

In addition, a second wireless network called *Gast* is established for the duration of the workshop. You can connect to this network with the following configuration:

Network name (SSID): Gast
Password: gastwelcome
Encryption: WP2
DHCP: On

The second step is to open your favorite browser and navigate to any website in order to trigger the redirect to the log-in-page of the University of Hildesheim (see screenshot below). On this page, enter the following user name and password:

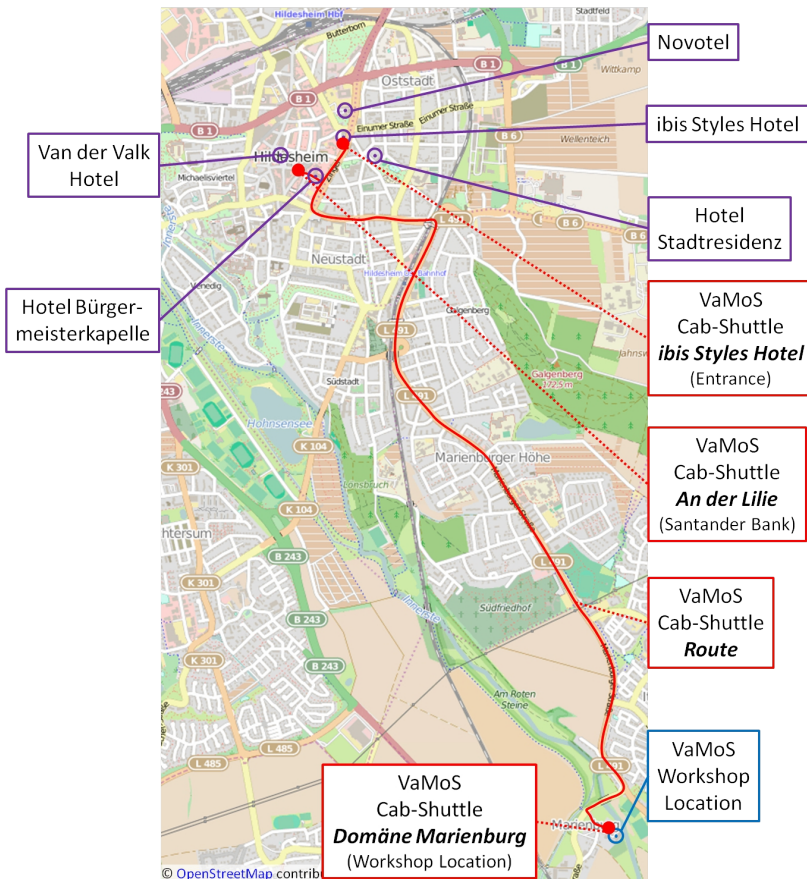
User name (Benutzername): vamos
Password (Passwort): 9dpuJnTh



The screenshot shows a web browser window with the title "Wireless Network Authent...". The address bar displays a URL starting with "https://1.1.1.3/fs/customwebauth/login.html?". The main content area features the University of Hildesheim logo, which consists of a red stylized 'U' and 'H' inside a circular frame with the text "Universität Hildesheim". Below the logo, the text "Stiftung Universität Hildesheim" is displayed in a large, bold, black font. Underneath, there are two input fields: "Benutzername:" with the value "vamos" and "Passwort:" with masked characters "*****". A red "Submit" button is positioned below the password field. At the bottom of the page, a message states "Die Session ist für 60 min. gültig".

VaMoS Cab-Shuttle

For attendees of the VaMoS workshop a VaMoS cab-shuttle is available twice a day. In the morning the cabs will stop at the entrance of the *ibis styles hotel*. A second stop will be at the *Santander Bank* near *An der Lilie* (at the corner of *Rathausstraße* and *Scheelenstraße*). The cabs will then directly drive to the workshop location at the *Domäne Marienburg*.



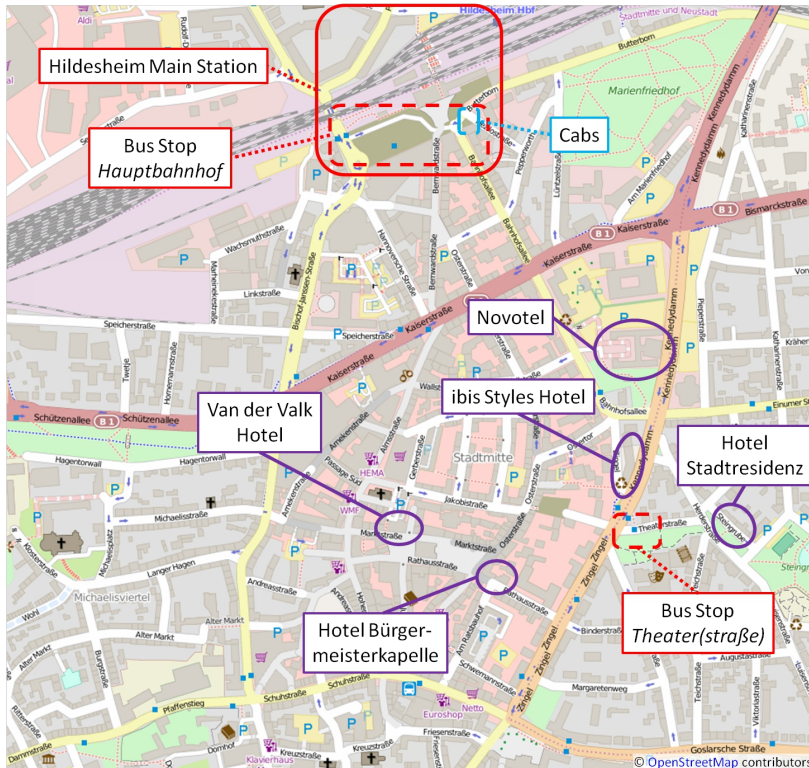
In the evening the cabs will drive back from the workshop location to *An der Lilie* and *ibis styles hotel* (except for Friday: separate lists at the workshop for cab-sharing).

On the next page you will find a detailed map of the hotels and cab-stop locations as well as a timetable for the VaMoS cab-shuttle.

Day	Hotels to VaMoS Location	VaMoS Location to Hotels
Day 1, Wednesday	8:20 (<i>ibis styles hotel</i>) 8:25 (<i>An der Lilie</i>) 8:40 (<i>workshop location</i>)	17:45 (<i>workshop location</i>) 18:00 (<i>An der Lilie</i>) 18:05 (<i>ibis styles hotel</i>)
Day 2, Thursday	8:30 (<i>ibis styles hotel</i>) 8:35 (<i>An der Lilie</i>) 8:50 (<i>workshop location</i>)	17:45 (<i>workshop location</i>) 18:00 (<i>An der Lilie</i>) 18:05 (<i>ibis styles hotel</i>)
Day 3, Friday	8:30 (<i>ibis styles hotel</i>) 8:35 (<i>An der Lilie</i>) 8:50 (<i>workshop location</i>)	<i>We will give around lists at the workshop for cab-sharing.</i>

Day	Hotels to VaMoS Location	VaMoS Location to Hotels
Day 1, Wednesday	8:20 (<i>ibis styles hotel</i>) 8:25 (<i>An der Lilie</i>) 8:40 (<i>workshop location</i>)	17:45 (<i>workshop location</i>) 18:00 (<i>An der Lilie</i>) 18:05 (<i>ibis styles hotel</i>)
Day 2, Thursday	8:30 (<i>ibis styles hotel</i>) 8:35 (<i>An der Lilie</i>) 8:50 (<i>workshop location</i>)	17:45 (<i>workshop location</i>) 18:00 (<i>An der Lilie</i>) 18:05 (<i>ibis styles hotel</i>)
Day 3, Friday	8:30 (<i>ibis styles hotel</i>) 8:35 (<i>An der Lilie</i>) 8:50 (<i>workshop location</i>)	<i>We will give around lists at the workshop for cab-sharing.</i>

Public Transport and Cab-Services



Public Transport

Costs per ticket (single person): 2,30 euro (the ticket is valid for 60 minutes and can be bought from the bus driver)

Other types of tickets:

- Full-day-ticket (single person): 5,00 euro. It is valid until the end of the day
- Multi-ticket (5 at once, single person): 10,40 euro (= 2,08 euro per ticket) at special shops, for instance at the tobacco shop inside Hildesheim main station. These tickets have to be stamped when entering the bus.
- Group ticket (up to 5 persons): 7,30 euro. It is valid up from 9:00am (Monday-Friday)

Starting from bus station *Theater* or *Theaterstraße*, you can take the following alternative connections to the workshop location (bus station *Itzum Scharfe Ecke*):

- Connection 1:** *Theater*: bus line 5 (direction *Stadtfeld-Ost*) to *Moltkestraße*
 Change from bus line 5 to bus line 3 at *Moltkestraße*
Moltkestraße: bus line 3 (direction *Itzum Scharfe Ecke*) to *Itzum Scharfe Ecke*
- Connection 2:** *Theater*: bus line 1 (direction *Bavenstedt*) to *Bahnhof* (main station)
 Change from bus line 1 to bus line 3 at *Bahnhof* (main station)
Bahnhof (main station): bus line 3 (direction *Itzum Scharfe Ecke*) to *Itzum Scharfe Ecke*
- Connection 3:** *Theaterstraße*: bus line 43 (direction *Ochtersum Süd*) to *Hindenburgplatz*
 Change from bus line 43 to bus line 34 at *Hindenburgplatz*
Hindenburgplatz: bus line 34 (direction *Hackenstedt*) to *Itzum Scharfe Ecke*

From station *Itzum Scharfe Ecke* workshop signs will guide you to the workshop location (see map on page 14).

In order to find a suitable time or a different connection, you can search for your bus connection at: www.efa.de

Cab-Services

From Hildesheim main station or your hotel you can also hire a cab to get to the hotels or the workshop location. Cabs are waiting in front of the main station (see map on page 12).

Main Station to Workshop Location: Destination: Domäne Marienburg
 Costs: 17-20 €
 Travel time: ~15 minutes

Phone numbers of cab-services in Hildesheim:

+49 (0) 5121 / 55 55 5

+49 (0) 176 / 12 24 24 24

+49 (0) 176 / 62 00 86 55

Contact Information

In case you get lost or have any other urgent requests you can contact:

Mrs. Leman Sözücök

Tel.: +49 (0)5121 883-40330

Please note that your call might be redirected to Mrs. Sözücök's cell phone.

Visiting Hildesheim

In case you would like to enjoy Hildesheim on your own, you can contact the Hildesheim Tourist Information to get plenty of information about Hildesheim's sites and current events.

Interesting Websites

Hildesheim Tourist: www.hildesheim.de/tourist-info

Hildesheim Cityguide App: <http://hildesheim.cityguide.de>

Bus Schedules: <http://www.stadtverkehr-hildesheim.de/> or
<http://www.efa.de/>

University of Hildesheim: www.uni-hildesheim.de/en

Software Systems Engineering Group: www.sse.uni-hildesheim.de/en

Edition Notice

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