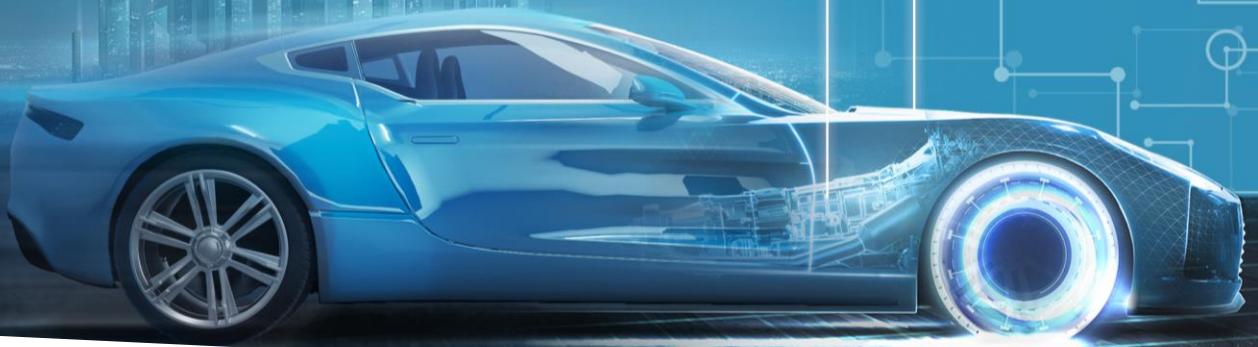


QTronic User Conference 2019  
**Virtual ECUs and Applications**



**Conference program**  
December 2nd and 3rd, 2019  
Harnack-Haus, Berlin

## Overview

Following the great success of the [QTronic User Conference 2018](#), QTronic invites to the second conference on virtual ECUs and Applications in automotive software development.

The conference takes place on December 2nd, 2019 at the Harnack-Haus in Berlin, with presentations given by leading car manufactures and suppliers. The presentations will be given in German or in English. German talks will be simultaneously translated into English.

In addition, we offer a free tutorial day for Silver and TestWeaver on December 3rd, 2019.



### QTronic User Conference 2019 – Virtual ECUs and Applications

Program	Day one: December 2nd, 2019 – Conference Day two: December 3rd, 2019 – Tutorial sessions for Silver and TestWeaver
Participation fee	Participation is free of charge – but you need to register and to get accepted for participation
Registration	Registration via email to <a href="mailto:vECU-2019@qtronic.de">vECU-2019@qtronic.de</a> Deadline for registration: November 18th, 2019
Location	Harnack-Haus – conference venue of the Max Planck Society Ihnestr. 16-20 – 14195 Berlin, Germany
Presentations	Presentations will be about 20 minutes, followed by 10 minutes discussion time. Simultaneous translation from German to English will be provided.
Contact	QTronic <a href="mailto:vECU-2019@qtronic.de">vECU-2019@qtronic.de</a> <a href="http://www.qtronic.de">www.qtronic.de</a> Phone +49 30 30364868

### QTronic User Conference 2019 – Virtual ECUs and Applications

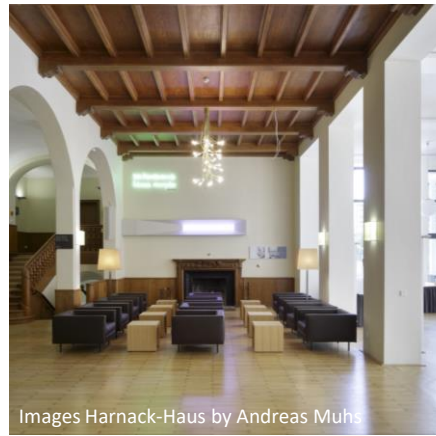
Time	Content	Speaker
08.30	Registration	
09.30	Opening	Dr. Jakob Mauss / QTronic
09.50	Virtual ECU powertrain simulation	Christopher Gertzen / BMW
10.30	Virtualization of an engine control unit based on object files	Osman Gencuenal / Daimler
11.00	Virtual based automated testing for automotive body ECUs	Matoba Kazumasa / Aisin Seiki
11.30	coffee break	
12.00	Early verification and testing of a mechatronic active roll control	Dr. Hua Huang / Schaeffler
12.30	<Title of the presentation to be announced>	Lionel Belmon / QTronic China
13.00	break - lunch	
14.00	Development of chassis software components with virtual prototypes	Andreas Schmidt / Audi
14.30	<Title of the presentation to be announced>	Moritz Stockmeier / AMG
15.00	coffee break	
15.30	What's new in Silver	Dr. Andreas Junghanns / QTronic
16.00	What's new in TestWeaver	Dr. Mugur Tatar / QTronic
16.30	Time for discussion with QTronic experts	
17.30	Get-together with mulled wine	
18.00	Dinner	
22.30	End of day one	

Time	Tutorial Session	Content
08.00	Registration	
08.15	Opening	
08.20	T0 – Overview on Silver and TestWeaver	This introduction explains how QTronic tools are used to move selected development tasks for automotive powertrains to PC.
09.00	T1 – Pre-calibration of powertrain controllers	How to connect Canape, INCA and ATI Vision to a Silver virtual ECU for online tuning and measurement on PC, without accessing real hardware.
09.30	T2 – Test automation with Silver and Excel	Module test is a major use case of virtual ECUs. This tutorial surveys options to automate such tests on PC.
10.00	T3 – Requirement modeling with RML	Survey of TestWeaver's Requirement Modeling Language (RML) used to translate given system specifications into executable form.
10.30	T4 – Large-coverage testing	TestWeaver's test case generator used to search for flaws and bugs and to maximize test coverage with respect to given coverage goals.
11.00	Coffee break	
11.30	T5 – AUTOSAR support in Silver	Silver 4.0 provides a powerful RTE generator. This allows to quickly run one or many AUTOSAR Software Components (SwC) in Silver.
12.00	T6 – Simulink support in Silver	Survey of Silver bridges to MATLAB/Simulink: Silver-Simulink co-simulation, running Simulink models (mdl, mexw32, mexw64) in Silver, running Silver vECUs in Simulink.
12.30	T7 – Continuous Integration	This tutorial explains how to setup test automation with Silver and TestWeaver based on Jenkins, the free web-based open-source tool for continuous integration.
13.00	Lunch break	
14.00	T8 – Mixed ECU/vECU applications (real-time)	This tutorial surveys options to simplify HiL setups and test rigs using Silver virtual ECUs, based on Silver's real-time execution mode.
14.30	T9 – Building virtual ECUs from C code	This tutorial shows how to build a virtual ECU from given C code or object files compiled for Windows PC.
15.00	T10 – Building virtual ECUs using chip simulation	This tutorial shows how to build a virtual ECU from given target binaries (hex/s19 or elf file) using Silver's chip simulator for Tricore and PowerPC.
15.30	T11 – Running basic software in Silver	Automotive SW accesses sensors, actuators and the real-time OS through well-defined interfaces. This tutorial shows how to either run or emulate/replace the low-level software when building a Silver vECU.
16.00	T12 – ADAS and autonomous driving	This tutorial surveys Silver and TestWeaver options to generate, simulate and test traffic scenarios, for instance by connecting to IPG CarMaker.
16.30	Coffee break and end of event	

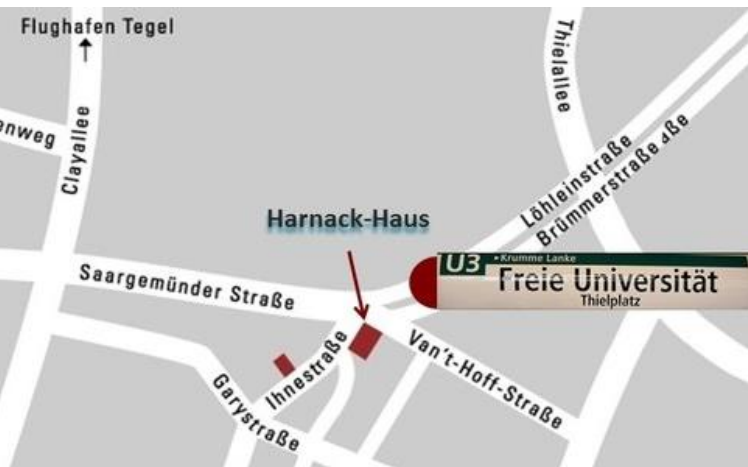




Location  
Harnack-Haus



Images Harnack-Haus by Andreas Muhs



### How to get to the Harnack-Haus

The Harnack House is easily accessible by car or public transport. The following link will give you a specific description, whether by car, train or plane.

[www.harnackhaus-berlin.mpg.de/11090/Directions](http://www.harnackhaus-berlin.mpg.de/11090/Directions)