



**Technical HOT**  
**September 24, 2019**  
**Heidelberg/Germany**

<b>09:00 – 09:30</b>	<b>Get-together</b>
09:30 - 11:00	History and functionality of Linux and real-time Linux <ul style="list-style-type: none"><li>• Real-time extensions compared to PREEMPT_RT</li><li>• Functionalities of PREEMPT_RT</li><li>• Linux Foundation RTL Collaborative Project, etc</li></ul>
<b>11:00 – 11:30</b>	<b>Coffee break</b>
11:30 – 13:00	Debug and trace interface of the Linux kernel and why it is important for real-time (partly hands-on session if requested) <ul style="list-style-type: none"><li>• Function tracing</li><li>• Event tracing</li><li>• Latency tracing</li><li>• Principle of backtracking</li></ul>
<b>13:00 – 14:00</b>	<b>Lunch break</b>
14:00 – 15:00	Determination of the real-time properties of a Linux system, presentation of the OSADL QA Farm <ul style="list-style-type: none"><li>• Latency testing</li><li>• Latency plots</li><li>• Latency recording</li><li>• Hardware latency detector</li><li>• Quality test center</li></ul>
<b>15:00 – 15:30</b>	<b>Coffee break</b>
15:30 – 17:00	What causes system latencies? (partly hands-on session if requested) <ul style="list-style-type: none"><li>• Generator of artificial latency</li><li>• Crash analysis including post-mortem debugging</li><li>• Various methods to trigger system data dump</li></ul>
<b>Approx. 17:00</b>	<b>End of Technical HOT</b>

**Speakers:** Dr. Carsten Emde and Caren Kresse, OSADL