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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td><strong>09:00 – 09:30</strong></td>
<td>Get-together</td>
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| 09:30 - 11:00 | History and functionality of Linux and real-time Linux  
- Real-time extensions compared to PREEMPT_RT  
- Functionalities of PREEMPT_RT  
- Linux Foundation RTL Collaborative Project, etc |
| **11:00 – 11:30** | Coffee break                                                                                   |
| 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)  
- Function tracing  
- Event tracing  
- Latency tracing  
- Principle of backtracking |
| **13:00 – 14:00** | Lunch break                                                                                    |
| 14:00 – 15:00 | Determination of the real-time properties of a Linux system, presentation of the OSADL QA Farm  
- Latency testing  
- Latency plots  
- Latency recording  
- Hardware latency detector  
- Quality test center |
| **15:00 – 15:30** | Coffee break                                                                                   |
| 15:30 – 17:00 | What causes system latencies? (partly hands-on session if requested)  
- Generator of artificial latency  
- Crash analysis including post-mortem debugging  
- Various methods to trigger system data dump |
| **Approx. 17:00** | End of Technical HOT                                                                            |

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