

LSE Summer Week 2013

From Tuesday 16 to Thursday 18 July 2013



Tuesday 16

19h30 19h35	Introducing the LSE Week	
19h35 20h05	Non Interference Property A useful property for formal verification	Marwan Burelle
20h10 20h55	Reliable Services on Top of Untrustworthy Large Scale Decentralized Networks	Julien Quintard Professional Guest
21h00 21h30	mikro - Introducing a C++ Micro Kernel Issues and choices to develop a C++ micro kernel from scratch	Victor Apercé Julien Freche
21h35 22h05	mikro - About Paging About everything you should know about paging on x86	Victor Apercé
22h10 22h30	mikro - Efficient Inter Process Communications How to have efficient IPC in a micro kernel?	Victor Apercé Julien Freche
22h35 22h55	mikro - Multiprocessor Init in Kernel Multiprocessor initialization on x86	Julien Freche

Wednesday 17

19h30 20h00	HOWTO: Boot an OS From BIOS to kernel	Camille Lecuyer Student Guest
20h05 20h25	Machine Learning Applied to Process Scheduling Using machine learning to improve scheduling	Benoît Zanotti
20h30 21h00	Networking in STOS IP stack for the Intel e1000 in STOS	lvan Delalande
21h05 21h25	v8086, Execute 16bit Code in Protected Mode Advantages and disadvantages of the v8086 mode	Corentin Derbois
21h30 22h15	Hardware/Software Solutions to x86 Virtualization Hardware virtualization and host communication mechanisms	Marc Angel Corentin Derbois
22h20 22h50	KVM without Qemu Replacing qemu by our own code	Gabriel Laskar

Thursday 18

13h30 14h15	HOWTO: Basic Vulnerabilities and their Exploitation Buffer overflow, format string, use after free	Samuel Angebault
14h25 15h10	Order Is a Lie From memory barrier to non-blocking algorithm (lock-free/wait-free)	Marwan Burelle
15h20 16h05	Helping Reverse Engineering with LLVM LLVM intermediate language as target of a decompilation tool	Lionel Auroux
16h15 16h45	The Hell of x86 Kernel Debugging Some peculiarities of the x86 architecture and its RING0	Clément Rouault
16h55 17h25	Advanced Python Features Gone Bad Python code obfuscation and main interpreter surgery	Franck Michea Clément Rouault
17h35 18h20	A Look into the Windows Kernel Security evolution between Windows XP and Windows 8 kernels	Bruno Pujos
18h30 19h15	Concolic Execution Use both symbolic and concrete execution to solve a constraint path	Jonathan Salwan Professional Guest
19h30	Barbecue	