Verified trustworthy software systems

Monday 4 – Tuesday 5 April 2016
Royal Society discussion meeting organised by
Professor Philippa Gardner, Professor Peter O'Hearn, Professor Mike Gordon FRS, Professor Greg Morrisett and Professor Fred Schneider

THE ROYAL SOCIETY

DAY 1				DAY 2			
Session 1 **Chair : John Launchbury**		**Session 2** **Chair : Warren Hunt**		**Session 3** **Chair : Gordon Plotkin**		**Session 4** **Chair : David Sands**	
09:00	Welcome by Lesley Miles and Sir Tony Hoare FRS						
09:10	**J. Strother Moore** Industrial hardware and software verification with ACL2	**13:35**	**Daniel Kroening** Program analysis using syntax-guided synthesis engines	**09:00**	**Peter O'Hearn** Moving fast with software verification	**13:30**	**Michael Backes** imPACT: Privacy, Accountability, Compliance and Trust in Tomorrow's Internet.
09:45	**Cédric Fournet** miTLS: Verified Reference Implementations for TLS.	**14:10**	**Gerwin Klein** Provably trustworthy systems	**09:35**	**Philippa Gardner** Understanding and verifying JavaScript programs	**14:05**	**Alexey Gotsman** A rigorous approach to consistency in cloud databases
10:20	Coffee	**14:45**	Tea	**10:10**	Coffee	**14:40**	Tea
10:45	**Kathleen Fisher** Using formal methods to eliminate exploitable bugs	**15:10**	**Nickolai Zeldovich** Using Crash Hoare logic for certifying the FSCQ file system	**10:40**	**Fred B. Schneider** Avoiding fatal flaws with formal methods	**15:10**	**Xavier Leroy** Trust in programming tools: the formal verification of compilers and static analysers
11:20	**Neil White** Formal verification: will the seedling ever flower?	**15:45**	**Mark Batty** Industrial concurrency specification for C/C++ & Nvidia GPUs	**11:15**	**Marco Pistoia** Combining static analysis and machine learning for industrial-quality information-flow-security enforcement	**15:45**	**Greg Morrisett** Mind the gap: from crypto to code
11:55	**Discussion**: Verification in Industry	**16:20**	**Discussion**: Verification in Academia	**11:50**	**Discussion**: Verification in the Future	**16:20**	**Discussion**: What next for Verification?
12:35	LUNCH	**17:00**	CLOSE AND RECEPTION	**12:30**	LUNCH	**17:00**	CLOSE