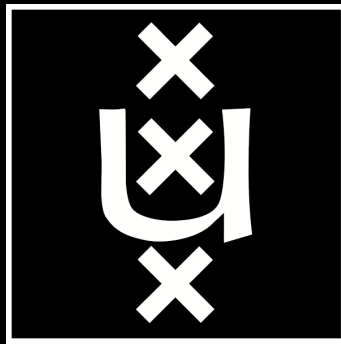


# SARNET: Security Autonomous Response with programmable NETWORKs

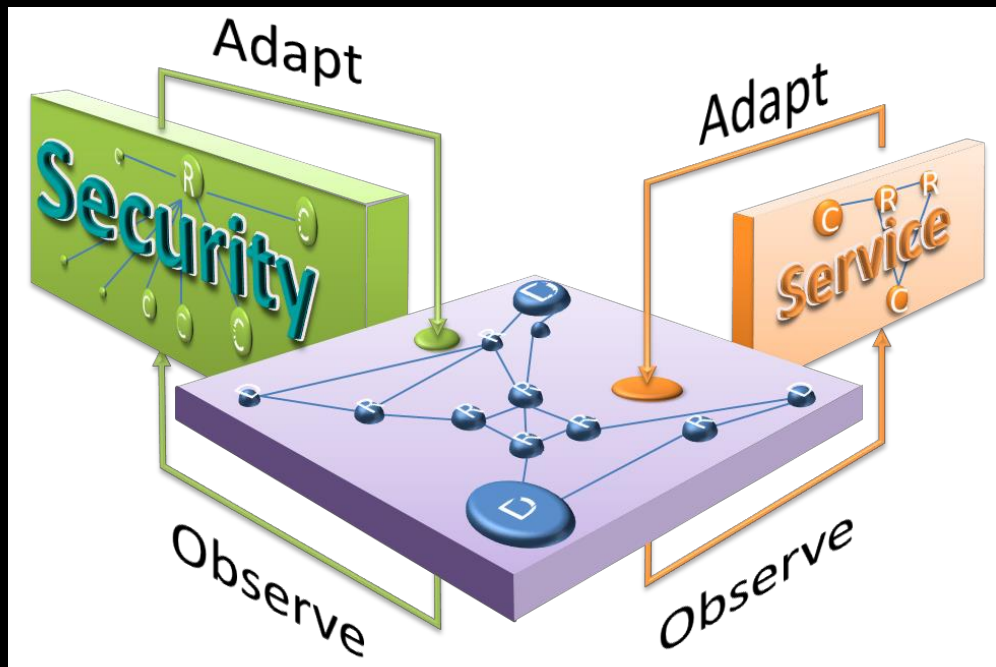
Cees de Laat



# Cyber security program

- Research goal:
  - obtain the knowledge to create ICT systems that model their state (situation), discover by observations and reasoning if and how an attack is developing and calculate the associated risks. In addition, our goal is to have the knowledge to calculate the effect of counter measures on states and their risks, choose and execute one. In short, a we research the concept of networked computer infrastructures exhibiting SAR: Security Autonomous Response.





**3 PhD's  
Programming and  
Engineering manpower**

- Network virtualizations and SDN
- Reasoning
- Risk evaluation
- Trust groups
- Execute response & adaptation

# Line of research

- 1997: Need for authorization framework for combination of resources across domains
- 1998: AAA-ARCHitecture research in IRTF
- 2000: RFC 2903-2906, 3334
- 2005: open versus not so open exchanges
- 2006: start of trust research (also in rfc 2904)
- 2012: I2-spring session presenting line of research
- 2014: PhD defense of research plus publication
- 2015: Here we are.

# Program

16h30	Cees de Laat	Opening and Introduction
16h35	Leon Gommans	Creating a SARNET alliance
16h55	Rodney Wilson	SARNET testbed
17h05	Cees de Laat	Panel introduction
17h06	Chip Elliot	
17h10	Ken Klingenstein	
17h14	Inder Monga	
17h18	Jerry Sobieski	
17h22	panel	discussion
17h29	Next steps	
17h30	end	

# More Info

- <http://delaat.net/sarnet>
- <http://delaat.net/pubs/2014-7-3.pdf>
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