	Mo., 08/05	Tu., 09/05	We., 10/05	Th., 11/05	Fr., 12/05
07:30 - 08:45	Breakfast				
09:00 - 10:15ish	Intro & Rules of	Thill	Hupkes	Stenning	Hackathon
	the Game	Taatgen	Alhama	Weyde	
	Lamb	Borst	Spranger	Davidson	
10:30ish	Coffee				
10:45 - 12:15	Garcez	Bechberger	Stenning	Hackathon	Hackathon
	Jay	Lewis	Furbach		Summary &
	Besold	Seeliger	Kühnberger		Wrap-Up
12:15 - 13:45	Lunch				Lunch (-13:00)
13:45 - 15:30	Doran	Seeliger	Eveursian (vs.)	Hackathon	
	Hitzler	van der Velde			
	Serafini	de Kamps			
15:30 - 15:45	Coffee		Excursion (vs.) Hike (vs.)	Coffee	
15:45 - 18:00ish	Gori	Hackathon	Hackathon	Hackathon	
	Silver				
	<del>van der Velde</del>				
	<del>de Kamps</del>				
18:00ish - 19:30	Dinner				
19:30 - 20:30	Evening	Evening			
	Discussion with	Discussion with Keith Stenning	free	free	
	Caroline Jay				

# Monday, 08/05:

#### 09:00 - 10:15ish:

- Introduction & Rules oft he Game
- Lamb: From Turing to Deep Learning Explaining Artificial Intelligence through neurons and symbols

## 10:45 - 12:15:

- Garcez: Neural-Symbolic Computing for Human-Like Computing
- Jay: Human Perception of Ontologies
- Besold: Comprehensible Inductive Logic Programming

## 13:45 - 15:30:

- Doran: Explainable Interpretations of Trained Deep Networks
- Hitzler: Semantic Web Resources for Understanding Trained Deep Networks
- Serafini: Logic Tensor Networks

## 15:45 - 18:00ish:

- Gori: Parsimonious logic and constraint machines
- Silver:
  - o A Scalable Unsupervised Deep Multimodal Learning System
  - o Learning in a Community of Agents Sharing Symbols of Concepts

#### 19:30 - 20:30:

- Jay: Human-like Software Engineering

# Tuesday, 09/05:

## 09:00 - 10:15ish:

- Thill: Tying Theories of Embodiment to Symbolic Levels of Reasoning
- Taatgen: Multiple Levels of Abstraction in Simulating Human-Like Intelligence
- Borst: Using Evidence Accumulation to Bridge the Gap between Neural Networks and Symbolic Cognitive Control

## 10:45 - 12:15:

- Bechberger: Conceptual Spaces A Bridge Between Neural and Symbolic Representations?
- Lewis: Compositional Distributional Cognition

## 13:45 - 15:30:

- Seeliger: Neural Network Representations and Visual Processing in Brains
- Van der Velde: Overview of Neural-Symbolic Processing in Neural Blackboard Architectures
- De Kamps: Dynamics for the Neural Blackboard Architecture

## 15:45 - 18:00ish:

- Hackathon

## 19:30 - 20:30:

- Stenning: Experiments on how People Deal with Uncertainty

# Wednesday, 10/05:

## 09:00 - 10:15ish:

- Hupkes: tba.
- Alhama: Pre-Wiring and Pre-Training What does a neural network need to learn to truly general identity rules?
- Spranger: Neural Construction Grammar Some thoughts on language processing, learning and evolution in grounded, neural-symbolic systems

## 10:45 - 12:15:

- Furbach: Tackling Commonsense Reasoning Benchmarks
- Kühnberger: Industrial Scale Cognitive Computing

## 13:45 - 15:30:

- Excursion vs. Hike vs. Hackathon

## 15:45 – 18:00ish:

- Excursion vs. Hike vs. Hackathon

# **Thursday, 11/05:**

# 09:00 – 10:15ish:

- Stenning: Distinguishing kinds of uncertainty

Weyde: tba.Davidson: tba.

# 10:45 - 12:15:

- Hackathon

# 13:45 - 15:30:

- Hackathon

# 15:45 – 18:00ish:

- Hackathon

# Friday, 12/05:

# 09:00 - 10:15ish:

- Hackathon Reports & Discussion

# 10:45 - 12:15:

- Wrap-Up & Follow-Up Initiatives