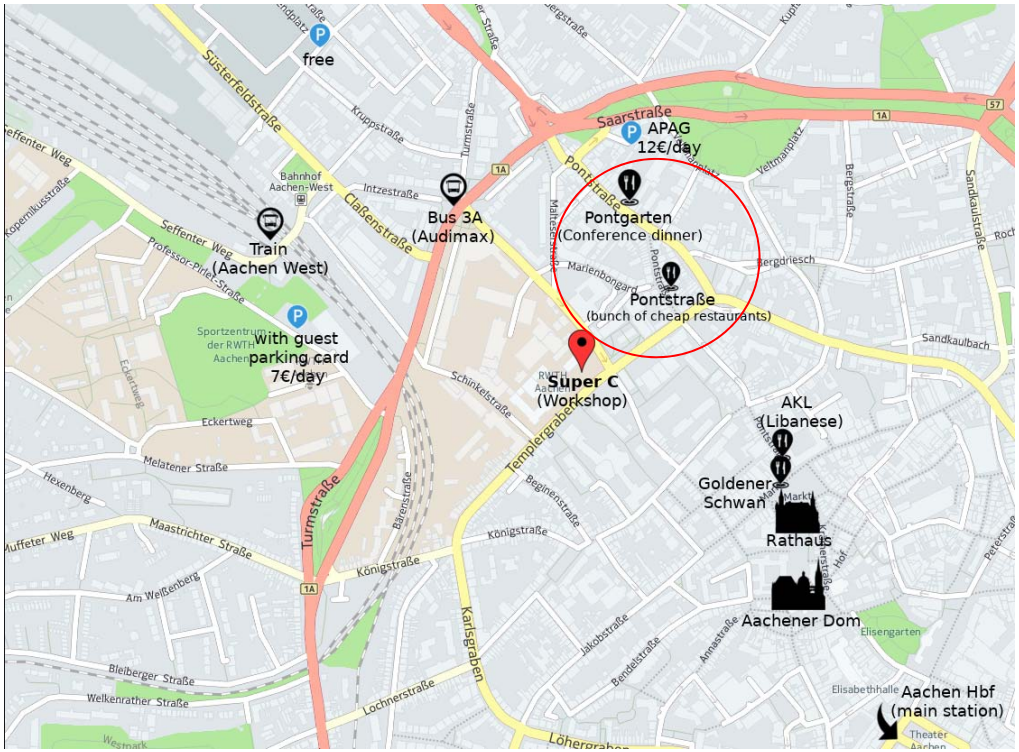
Big Data Science in Astroparticle Physics

Martin Erdmann & Andreas Haungs

Organizational matters



eduroam
or
MoPS
Login: **deeplearning**
PW: **cisyhy**

Please: **No Food** in Ford-Room

HAP Workshop | Big Data Science in Astroparticle Physics
Aachen, 20.02. – 22.02.2017

I need somebodies
HELP!

HELMHOLTZ GEMEINSCHAFT
Allianz für Astroteilchenphysik
RWTH AACHEN UNIVERSITY

Your action is required

Speakers please provide **USB** stick with your talk we recommend pdf as the default format.
The aspect ratio of the beamer is 16:10 (1920 x 1200).
Powerpoint and Keynote presentations are possible on request; in addition bring a pdf for fallback.

Tuesday 21-Feb. latest 18:00

Evaluation (web link):
workshop & future planning
impacts Wednesday 22-Feb.
discussion with BMBF

http://vispa05-sus.limequery.org/489976

Workshop: Big data science in astroparticle research 20-22 Feb. 2017

	Monday 14:00	Welcome: Dean of Faculty of Mathematics, Computer Science and Natural Sciences	Prof. SCHAEL, Stefan
	Monday 14:15	Deep Learning Tutorial: basic concepts, fully connected networks	Mr. WALZ, David
	Monday 16:15	Workshop photo	
	Monday 16:15	Deep Learning Tutorial: advanced architectures, convolutional networks	Mr. WALZ, David
Deep Learning	Tuesday 09:00	Organisational Matter	Prof. ERDMANN, Martin
Deep Learning	Tuesday 09:15	Deep Learning for neutrino telescopes	Dr. GEIßELSÖDER, Stefan
Deep Learning	Tuesday 09:40	Deep Learning in Astroparticle Physics exemplified by the Reconstruction of Muon-Neutrino Events in IceCube	Mr. HÜNNEFELD, Mirco
Deep Learning	Tuesday 10:05	Recognizing patterns in the arrival directions of ultra-high energy cosmic rays using deep neural networks	Mr. WIRTZ, Marcus
	Tuesday 10:30	Message of the Vice-Rector for Research and Structure of the RWTH Aachen University	Prof. MATHAR, Rudolf
Deep Learning	Tuesday 11:15	Convolutional Networks in Computer Vision	Prof. LEIBE, Bastian
Deep Learning	Tuesday 12:05	Machine Learning in gamma-ray astronomy: More than just Background-Suppression	Mr. NOETHE, Maximilian
Deep Learning	Tuesday 12:25	Pattern recognition in KM3NeT: A multi-dimensional challenge	Dr. COELHO, Joao
Deep Learning	Tuesday 14:30	Spatiotemporal Integration in Recurrent Deep Neural Networks	Prof. BEHNKE, Sven
Deep Learning	Tuesday 15:15	Exploring deep network architectures to reconstruct cosmic ray induced air showers	Mr. GLOMBITZA, Jonas
Deep Learning	Tuesday 15:35	Using neural nets to predict SUSY yields at the LHC	Prof. TATTERSALL, Jamie
Deep Learning	Tuesday 15:55	Event reconstruction and classification in proton-proton collisions using deep neural networks	Mr. RATH, Yannik
	Tuesday 16:00	Evaluation (web)	
Deep Learning	Tuesday 16:45	Biological neuronal networks - from structure to activity	Prof. HELIAS, Moritz
Deep Learning	Tuesday 17:25	CREDO: a global cosmic-ray analysis and data processing challenges	Mr. SUSHCHOV, Oleksandr
Deep Learning	Tuesday 17:45	Workflow Management for user analyses in particle physics	Mr. FISCHER, Robert
Deep Learning	Tuesday 18:05	GPU usage of Auger data in the Offline Framework	Dr. RAUTENBERG, Julian
	Tuesday 19:00-22:00	Workshop Dinner Pontgarten	
Open data	Wednesday 09:00	The path to the SKA: Big data challenges in radio astronomy	Dr. BARR, Ewan
Open data	Wednesday 09:50	Data Publishing, Standards, and the Payoff: A Brief Account of the Astronomical Virtual Observatory	Dr. DEMLEITNER, Markus
Open data	Wednesday 11:10	KCDC: data preservation and publication	Dr. HAUNGS, Andreas
Open data	Wednesday 11:35	Accelerating the Digital Transformation in Science	Dr. GAST, Mikael
	Wednesday 12:00	Discussion on Big Data Science in Astroparticle Physics	ERDMANN, HAUNGS