## Conference "Big Data made in Germany", 29.6.2017

Welcoming Address of Prof. Dr. Klaus Semlinger, President of HTW Berlin

Dear colleagues, ladies and gentlemen,

It is a great pleasure to welcome you to this conference on "Big Data made in Germany".

Representatives of large scientific organizations are present to share with us their view on Big Data – the potential and requirements.

Especially, I would like to welcome three participants by their name because they will give the key note speeches of today.

## Thus, I welcome

- Ian Bird, head of IT of the Large Hadron Collider at CERN,
- Phil Diamond, director general of SKA the Square Kilometre Array Project), and
- Matthias Steinmetz, scientific chairman of the Leibniz Institute of Astrophysics Potsdam,

The conference is about Big Data – Big Data as a promise of scientific and societal progress as well as of commercial success. However, to make the promises come true there is need for further research in Big Data technology and for further investments in Big Data infrastructure. All these issues will be addressed at this conference.

Today, US IT-companies dominate the global market and large Chinese IT-companies are forcefully crowding into the scene. Facing this challenge, Germany has to make up a considerable backlog to retain control, to keep up with the competitors, or even to get into the lead.

What are the goals of the conference?

Today, upcoming trends in Big Data are presented. The spectrum of the talks is quite large, many research and technological facets of Big Data will be addressed.

As I already mentioned, Big Data has a major impact on our daily life and this impact will increase. This is not a forecast, it's already a fact.

Industry 4.0, for example, already changes the way how we are working. Many jobs will disappear, most undergo or will undergo more or less dramatic changes and – luckily – new jobs will be created.

Algorithms are and will be used more intensively to run our economy and to simplify our everyday life. However, there are some risks and threats not only with regard to technical malfunctions but with regard to social cohesion, self-determination and personal freedom as well. Therefore, these threats not just refer to technical questions of safety and security but to ethical and legal questions, too. At least some of these questions will be discussed tomorrow.

In the end, the conference strives for some concluding recommendations for research policy, which will be presented and debated in a panel discussion of high-ranking representatives from science, industry and politics.

I have to confess, I'm not an expert in all these issues. I am just the president of HTW Berlin, which has organized this conference together with the German Long Wavelength Consortium (GLOW). GLOW was founded in 2006 to foster radio astronomy. Currently, GLOW is formed by 13 German university departments and research institutes. And I must say I am somewhat proud that my University of Applied Science hosts this conference of high-level experts.

Let me take the opportunity to briefly present our university.

Founded in 1994, today it is the largest University of Applied Sciences in Berlin and the east part of Germany. We have

- more than 13,000 students
- about 280 Professors and
- we run more than 70 different study programmes in engineering, management, economics, business law, design and cultural arts – and not at least:

- in Berlin, only behind the Technical University, we are the second largest institution of academic education in computer science and IT-technology offering a broad variety of specialized programmes like:
  - Media Informatics
  - Business Informatics
  - Environmental Informatics
  - Health Informatics
  - Engineering Informatics
  - Computer Engineering
  - · Game Design.

These names of our different programmes show that we at HTW Berlin focus on applied IT-Technology – not only with the special study programme "applied informatics". And this is true for our research and development activities, too.

We established three key research areas:

- Culture and Creative Industry Digital Economy
- Renewable Energy and Energy Efficiency
- Health research

Let me briefly introduce to you two selected research activities of my university which are close to the topic of this conference:

- First: The Centre for Biomedical Image and Information-Processing (cbmi) which is cooperating with industry and major healthcare institutions in Berlin, for example with Charité, one of Europe's largest university hospitals. The Centre is engaged in research projects that investigate in and apply methods, which generate and analyse large data volumes.
- Second: We are involved in a number of national and international Big Data projects. Most of these activities are based on long-term agreements with research centres of the Helmholtz Association, in particular with
  - o the German Electron-Synchrotron (DESY), and
  - the Karlsruhe Institute of Technology (KIT).

Not at least, we advise German astronomers on Big Data problems in context of the Square Kilometre Array Project (SKA), which will consist of thousands of telescopes to explore the fundamental laws of our Universe. Prof. Heßling would be able to say more.

Thus, I think, HTW Berlin is a proper place to host this conference, and I am happy, that we are part of the growing BIG DATA community.

Finally, I have to thank the many colleagues, who made this conference possible. Let me thank, in particular, the members of the German Long Wavelength Consortium (GLOW) for their strong support in organising this conference.

Let me also mention the many financial sponsors – their help was essential, too. They are too many to name them all, but I won't miss to wholeheartedly thank them and to refer your attention to the website of the conference where all their names are listed.

Not at least I would also like to express my sincere thanks to the speakers who are traveling from far distant places.

And now - truly finally - welcome again,

- have a pleasant stay at HTW Berlin at the bank of the river Spree,
- enjoy the conference and
- have stimulating and fruitful discussions.