

*Senate Welcome for IFIP SEC 2015, City Hall, 26.05.2015  
Welcoming Speech, Prof. Dr. Ingrid Schirmer,  
Vice Head of the Department of Informatics, Universität Hamburg*

Dear Vice President of the Parliament, Mrs. Barbara Duden,  
Dear State Secretary Dr. Eva Gumbel,  
IFIP President and Senior IT Auditor Leon Strous,  
IFIP Vice President and Technical Committee-11-Chair Prof. Yoko Murayama

Prof. Kai Rannenberg and Prof. Steven Furnell as General Chairs  
Prof. Hannes Federrath and Prof. Dieter Gollmann as Program Chairs  
Dr. Dominik Herrmann as Organizing Chair

Ladies and Gentlemen,

On behalf of the Department of Informatics at the University of Hamburg I want to welcome you all. My name is Ingrid Schirmer and I am Vice Head of our Department.

Exactly a week ago, you will already have heard it, a *steadfast prominent voice and advocate for the interests of IT security and privacy* – deeply rooted in our department in Hamburg while at the same time being active around the globe – *was silenced forever*. Our dear and treasured colleague Prof. Dr. Klaus Brunstein has passed away.

Perhaps some of you knew him – a *forceful, almost visionary individual*, with nearly prophetic qualities. He was member of the executive committee of the German Informatics society, founding the technical committee informatics and society, he was German representative in IFIP, Chairman of IFIP Technical Committee 9, elected IFIP Trustee and elected IFIP Vice President and from 2002 till 2004 the 14th elected IFIP President.

He was able to *combine an ethical reflection* on social accountability and computing, the prediction of the importance of privacy protection and security with his *own research work* - including a virus test center - and his dedicated and creative *lecturing*.

*His legacy is ours*, during this conference, within IFIP world-wide collaboration, and in the provision of and dedication towards an increasingly digitally infused future in freedom and peace.

*Looking back*: how many of us researchers or practitioners – we who have contributed to the rapid IT development – frankly, who of us could ever have foreseen or envisioned the divergent dimensions of today's digital pervasion? My own PhD supervisor in the database field in the late eighties wondered whether we should not be prepared to build upon the emerging internet. What a question, looking back from today's perspective.

I am always amazed that humankind – based on the aspiring and almost ingenious information technology – has been able, in a very short period of time, to construct a *totally new dimension*, a unique environment of gigantic extent: *digital space*. Based on technical networks and decentralized architectures on an ultra-large scale and of astounding complexity and variety, digital space provides on the surface multiple facets, easy to use, available on a world scale, from offering an incredible accessible information pool, a medium of communication, social platforms to a parallel world and,

above all as a driver, a global boundless marketplace – accessible everywhere thanks to mobile devices. All this has become reality. What an achievement and what an improvement!

*Looking ahead:* We are currently equipping our physical environment with sensors and smart devices in order to achieve an *intelligent cyber physical space*. Simultaneously we are *analyzing every inch of our path*, pacing up and down through digital space using almost dizzy algorithms, computing and storage capacities.

And we are all aware of the consequences:

- While using *unique empowerment* of human abilities we are at the same time *trapped* in digital space. In the future we will no longer be able to move, to communicate, to work and to shop etc. without leaving our analyzable traces in digital form – traces which are open to improvement or *misuse*.
- Our “analog” world is simply *inseparably intertwined* with the digital, a hybrid world, and we are *highly dependable* on the proper functioning of the digital – whether in our critical infrastructures or in our economy etc. – proper functioning which makes us efficient but also *vulnerable* regarding attacks and intrusion.
- With regard to the *social digital space* of information and communication – when once in a while someone from your research community grants me insight into areas I never look at or demonstrates an easy way to circumvent security mechanisms, I am really scared. A digital world connecting us but *bearing evil* with ever-changing forms and potentials.

We ourselves have the responsibility for this new man-made dimension. It is neither better nor worse than the “former” world but I think it is not wrong to say that it makes us more vulnerable and it might jeopardize our freedom in the end.

*Looking back, looking ahead, and now in the present time, in this hour:* you have come to this conference to acuminate your technical knowledge and craftiness as well as to let wisdom grow in order to think things through, taking a holistic perspective and understanding the consequences in manifold areas. Academia has to strengthen itself in its knowledge and resolve, its good will to have the inner strength and the hope to repel attacks, abuse, to dismantle brand new forms of cyber war and to find ways to prevent evil by raising their voice in political, social, educational, and economic discussion. I wish you *encounters* with others during these days in Hamburg which may strengthen your inner source of devotion. The combination of conferences will surely help towards this. Our gathering in this City Hall underlines the importance of what we need here and elsewhere: a *close cooperation between politics and academia* in this matter.

My *warm thanks* go to my esteemed department colleague Prof. Hannes Federrath - as Head of the Program Committee- , to Prof. Kai Ronneberg - as General Chair -, Prof. Dieter Gollmann from the Technical University and Dr. Dominik Herrmann as Organizing Chair for successfully bringing this conference to Hamburg.

Considering the development as briefly outlined, I think it is high time, indeed *high noon* – since we have, strictly speaking, already fallen far behind – to *integrate privacy and security issues into each of*

*our computer science fields in research and teaching.* Just as in some of the sessions you have discussed approaches to these questions. There should be a push in this direction. We need to come to terms with the present situation. *Rather than just hurrying along the track,* we should think of our responsibility for example in order to reorganize our curriculum for training our computer scientists accordingly and what's even more, to train in future the *majority of our University students and schoolchildren* in IT privacy and security issues based on appropriate material. That would be a social solution to the threads lying ahead.

And yet: there is *still more to come.*

For this, for example, *may I introduce to you the University of Hamburg's Department of Informatics* and what we are trying to get started there, also as a contribution to our local base, at Hamburg University. It feels at the moment like a window of opportunity, being prepared for during the past years.

We are a department currently in the *process of change,* a fascinating time. We are about 22 professors, of whom in the past 6 years 9 new colleagues have arrived and within the following year, or two we will gain another nine new professors – prescheduled professors and junior professors. At the moment, we have 9 appeal procedures in parallel. The background is our “alternation of generation” but also the acquisition of extra funding for more than 100 students/freshmen each year. We utilize this change strategically by forming three core areas: One in cognitive systems, the other in computing in science, and – which is no doubt interesting for you –our emerging topic *information governance technologies.*

Information governance technologies focus on the growing *importance and usage of information* in so many areas, such as cloud services, social networks, sensor networks.

The growing information retrieval and processing requires the definition and socio-technical management of *decisions rights and responsibility duties* in dealing with information in economy, society and technology. Technical systems have to be designed accordingly that they allow and support these rights and duties. Hence we focus on services, data and infrastructure from the perspectives of policies, architecture, engineering and education.

For this, we are very glad to have also the opportunity to install a *professorship for Ethics* in computer science continuing our department's tradition in ICT and society.

And around this topic I see good chances to build up – and this is what we (in my opinion) need to do further, which is still more to come – an *interdisciplinary center* for digital economy and society devoted to this topic under the head of the Hamburg Center for a Sustainable University.

Establishing this core area, this will emphasize further our position as the *largest educational institution* for computer science on the spot with each year 400 Bachelor and 200 Master students and more than 2,000 students in total. We have 10 different study courses, 5 Bachelor and 5 Master courses. Apart from the classical computer science courses, we have already introduced intentionally several courses which are already interdisciplinary with science, psychology, and economy etc., e.g. Human Computer Interaction.

This development is embedded in a *vivid and prospering city*, which is on its way/pursues the goal to becoming the *digital capital of Germany*, working on SmartPort and SmartCity projects. Our Information Governance Technologies topic will hopefully provide a highly needed and indispensable contribution.

So, in summary, you are *most welcome, indeed warmly welcome*. You, and above all your competence are most dearly needed in a world spinning ever faster, yet often uncaring and negligent of the consequences. I wish you optimal best encounters in wonderful surroundings.

Please *stay connected*, stay in touch, also with the development in our department and with our colleagues.

Let us consider the legacy of this one so dedicated researcher and colleague as well as an individual *distinctive voice*, Prof. Dr. Klaus Brunnstein. He would have been so happy and so proud to be with us today, at an IFIP conference, in the midst of “his topics” that he foresaw so distinctly and of which he warned unmistakably over decades, among “his” people of the IFIP for which he was so committed for providing these opportunities for networking, research and improvements. *He cannot be here today. But we are still alive* and can share his awareness and care in his spirit, and adopt his legacy. I wish you all a highly fruitful conference and vivid and meaningful encounters amongst each other.