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Speckle 2018: VII International Conference on Speckle Metrology

**Malgorzata Kujawińska
Leszek R. Jaroszewicz**
Editors

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Introduction

Dear Friends and Colleagues,

It is our pleasure and privilege to welcome you to Poland at the International Conference on Speckle Metrology, *Speckle2018*. The conference is held in Janów Podlaski, in Bishop's Castle dating back to the 15th century, recently transformed into a modern conference and leisure center and close to the Janów stables – the most famous Arabian horse breeders in this part of Europe.

Speckle2018 is the 7th in the series of the conferences started in 2000 in Lausanne and followed by *Speckle Metrology* 2003 in Trondheim (Norway), *Speckles, From Grains to Flowers* 2006 in Nîmes (France), *Speckle Fields Forever* 2010 in Florianópolis (Brasil), *Speckle Metrology* in Vigo (Portugal), *Laser Speckle* 2015 in Guanajuato (Mexico). For 18 years the speckle and optical metrology community from all over the world has gathered at Speckle Conferences to present their latest research, share information of current advancements in the field and set the future directions of research, development of commercial instrumentation and applications.

During *Speckle2018* we are delighted that several top international experts shared their knowledge and experience with all participants. Let us name two of them:

Professor Wolfgang Osten presented the keynote speech "*Optical metrology - the long and unstoppable way to become an outstanding measuring tool*", which shows continuous progress in bridging between science and industry which is granted by optical metrology, while Professor Mitsuo Takeda's invited talk takes us for the journey "*Noise Inspired Research – a Journey Through Speckle Driven Years*". The other invited talks and presentations cover a wide range of research starting from phase retrieval techniques, theory of speckle and noise in optical data, new approaches to optical data capture and representation, digital holography and tomography, computational imaging and applications of optical methods in natural and life science and in engineering.

The *Speckle2018* conference gathers scientists, engineers and students from 19 countries. We believe that the conference provides a stimulating environment for discussions and exchanging ideas during either the formal activities or the informal meetings, as well as the multiple social events. The meeting is an excellent opportunity to meet with old friends and establish new contacts at a beautiful place in Poland. Hopefully, it will be the starting point of many new joint ventures, research projects and friendships. We hope you enjoy the meeting.

**Małgorzata Kujawińska
Leszek R. Jaroszewicz**