Dear Colleagues,

We have a pleasure to invite you to take part at the Banach Center School and Conference

Complex Differential and Difference Equations

which will take place at the Mathematical Research and Conference Center at Będlewo, near Poznań, Poland, from September 3 to September 8, 2018 – School and from September 10 to September 14 – Conference.

The overall goal of the school and conference is to bring together the leading experts in the theory of differential and difference equations in the complex domain from different countries, to tackle and find approaches to open problems in the field, exchange recent research results, learn new methods in the related areas (which is invaluable especially for younger researchers) and identify new topics for future research. The meeting is also expected to promote existing and start new collaboration between colleagues in different countries.

During the school we plan a series of talks (4-5) on each topic, (possibly) followed by some problem or discussion session. For younger participants either the poster session or the short communications session will be organized. Although aimed primarily on younger researchers, some of the topics will be of interest to more experienced researchers.

Topics of the school:

- From the conformal group to symmetries of hypergeometric type equations (Jan Dereziński - Warsaw University);

- Different aspects of summability (Jorge Mozo-Fernández – Valladolid University);

- Resurgent structures in differential equations (Shingo Kamimoto – Hiroshima University);

- Algebro-geometric method for algebraic differential equations (Franz Winkler – Linz University, Rafael Sendra – University of Alcalá);

- Integrability of Hamiltonian systems (Masafumi Yoshino – Hiroshima University).

Main topics of the conference:

- WKB analysis and Stokes geometry of differential equations.

- Integrable systems with applications to mathematical physics.

- Ordinary differential equations in the complex plane.

- Holomorphic vector fields, normal forms.

- Formal solutions of PDEs, Gevrey estimates, asymptotic expansions, summability.

- Summability of formal solutions of difference equations.

For other information see the web page

https://www.impan.pl/en/activities/banach-center/conferences/18-cdde

With the best regards

Organizers (G. Filipuk, A. Lastra, G. Łysik, S. Michalik, Y. Takei, H. Żołądek)