

Report on the 21st Leibniz Conference: „The Developments of TRIZ“ by Justus Schollmeyer
Lichtenwalde (Germany), 24./25.11.2016

The *Leibniz Institute for Interdisciplinary Studies* hosted in collaboration with TRIZ Campus, GETRA-M and the TRIZ-Consulting Group its 21st Leibniz Conference in Lichtenwalde (Germany) on November 24/25. About 30 participants from three generations – inventors, engineers, innovators, educators, designers, entrepreneurs, historians and philosophers – were discussing the developments of TRIZ in Germany during the last 50 years. The purpose of the conference was to clarify the complex history of TRIZ in Germany and to allow the different traditions to learn from each other for the future. Generally speaking, the German TRIZ story started in the 1960s in the former German Democratic Republic before it entered the Federal Republic after Germany's reunification. Today the TRIZ story is reemerging in a project of the Association of German Engineers dedicated to the elaboration of official TRIZ guidelines for Germany.

After the president of the LIFIS, Frieder Sieber, had opened the conference, Justus Schollmeyer gave a brief outline of the conference's main idea. Horst Nähler (c4pi – Center for Product-Innovation) then presented how TRIZ changes the view on product development before Reinhard Schmid (Volkswagen AG) explained how a TRIZ-based procedural model helped him for strategic development in the automotive industry. The next presenter, Barbara Gronauer (StrategieInnovation), raised the question of how TRIZ might be of help when it comes to responsible innovation. Kai Hiltmann (University of Applied Sciences in Coburg) then introduced the audience to the German Engineering Association's project of elaborating TRIZ guidelines for Germany.

The following session was concerned with the history of the inventor schools in the former GDR. Since Michael Herrlich (Erfinder-Akademie Leipzig), the founder of the TRIZ based inventor schools in the former GDR could unfortunately not attend the conference, Justus Schollmeyer (LIFIS) presented on behalf of him an authorized text about the history of the inventor schools. Subsequently, Bernd Thomas (Association of Brandenburgian Engineers and Economists) spoke about the inventor schools in Eisenhüttenstadt in the 1980s. Finally the session was concluded by a presentation of Rainer Thiel (LIFIS) about the relations between invention, needs, contradictions and solutions.

The next session dealt with the topic of TRIZ and education. Kai Hiltmann was talking about the “Contradiction Oriented Innovation Strategy” (WOIS) and the master's program in Coburg. After that, Olaf Weber (LIFIS), who is training kids in creative problem solving by the means of robotics, gave insight into his work. The session was completed by a talk of Klaus Stanke (creativity trainer) on heuristics and the role of contradictions in the process of creative problem solving.

Before our community went over to the conference dinner, the philosopher and Leibniz researcher Hartmut Hecht (Leibniz Sozietät der Wissenschaften) elaborated on the genius of Leibniz, whom he portrayed as Germany's Leonardo Da Vinci by pointing out their similarities including Leibniz' cutting edge inventions.

The next day started with a presentation by Justus Schollmeyer on the roots of TRIZ in a tradition of dialectic-materialistic history of technology that most likely emerged in the first half of the twentieth century in the former Soviet Union. After that, Horst Nähler gave a talk about the laws of evolution in TRIZ, which flowed into a broad discussion about the scientific foundations of the TRIZ ideas.

The second session of the day was opened by Axel Popp (LIFIS), who spoke about social innovation and the importance of extending the categories when it comes to analyzing societal needs. Dietrich Balzer (LIFIS) then pointed towards the potential of combining TRIZ and AI. His presentation was followed by a talk on heuristics by Dieter Skrobotz (TFH Wildau).

The inventor and methodologist, Dietmar Zobel (LIFIS), finally opened the last session of the conference. He introduced the TRIZ approach from an active inventor's perspective and shared some of his experiences. Kai Hiltmann then gave an overview of different TRIZ based software programs for inventors. Finally, Rainer Thiel concluded the session with some reflections on contradictions and Altshuller's achievements.

After a short break the community convened for an open panel discussion that rotated around two questions: In which direction should TRIZ be developed and what can be done for it. It turned out that the major topic was its introduction into education.

All in all, the feedback of the participants was very positive and we are looking forward to planning future events on this topic. Our special thanks go to MATRIZ who sponsored the conference.

After the panel discussion we took the following picture of those who were still present:



Slides of the presentations can be found here:

<http://leibniz-institut.de/konferenzen/21-leibniz-konferenz-triz-systematisches-erfinden/lk21-detail/>