The Infinite in Mathematics

Düsseldorf, Germany, 26th November 2015

By Anja Brina

A meeting of the Interreligious Prayer Group Dusseldorf was held on the 16th of November 2015 under the motto "the Infinite in Mathematics" with a lecture on "Religion and Science", presented by Dr. Karl-Heinz Fricke.

After a welcoming round, we took time to reflect on the 13th of November terrorist attacks in Paris. We expressed our deep grief, thinking of the persons who lost their life at the hands of the suicide bombers. Our thoughts were also with those who were injured, some of them seriously. We prayed for all victims of terror in the world and for the many refugees who have had to leave their homes to escape a different form of terror. We thought about the perpetrators; we prayed that they transform their hatred and resentment into hope, trust, and peace. One by one, each participant had the opportunity to say a prayer or express a thought, and they also could place a flower on the table at the center of the circle. Finally, standing in a circle, holding hands and listening to the European anthem, we were filled with a great sense of unity.

The lecture "the Infinite in Mathematics" highlighted the development of the number concept in a historical perspective. Even the Pythagoreans realized that the natural numbers 1,2,3, .. and their relationships, and the rational numbers a/b, were not everything. There are an infinite number of gaps- for example, roots are not fractions. Perhaps it was the fear of their gods which prevented the Greeks from reaching a real understanding of the infinite. Only after more than a thousand years of Christian education, could Newton succeed by using his calculus to get through these loops and come to a proper explanation of the planetary orbits. Thus, the term limit itself made its way into mathematics, by which it was possible to close the gaps between the rational numbers and the continuum (real numbers). The presentation concluded with modern methods, these gaps (infinity) to include many different types and thereby come to a much broader understanding of the solvability of equations.

The discussion ranged from questions of understanding the infinite dimension of human life to thoughts about the spiritual world.

It was especially heartening that many young people were present and showed great interested in this topic. We continued to have a lot to of interesting discussions that evening while refreshments were served.