

Report on the HOPE in Nijmegen

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The Hypergeometric and Orthogonal Polynomials Event (HOPE) took place in the Radboud University Nijmegen, the Netherlands, on May 1–3, 2024. This was an in-person conference that gathered 31 participants from Europe, Israel, the USA and Argentina. Our goal as of the organisers was to discuss a variety of topics on the principal theme of the event, both from the perspective of their recent development and future perspectives, under a natural constraint that they were expected to meet our personal tastes. This has been fully accomplished during the three days and we were pleased to learn, together with all the participants, currents trends and standing problems in hypergeometric and orthogonal polynomials. It is certainly hard — and definitely unfair — to single out particular talks at the conference, so we limit ourselves to highlighting the topics featured: classical orthogonal polynomials, their numerous generalisations (including multiple, vector- and matrix-valued ones), connections with representation theory and applications in analysis, mathematical physics and number theory.

A detailed programme of the HOPE, together with available slides and notes for the talks, can be found on the website <https://www.math.ru.nl/~wzudilin/HOPE-in-May.html>. There one can also observe some *HOPEn problems* taken from the Problem Session at the conference. Needless to add is that extended lunch breaks and evenings remain wonderful occasions for further discussions and collaborations between the participants. The atmosphere of the event was not spoiled by heavy rain which happened after the delicious HOPE dinner at a restaurant near the campus.

We have received positive feedback from the participants, many of them hope that this is not the last HOPE. Time will show but we plan to keep the spirit (and puns) of this meeting alive. Borrowing the words of a young participant (with the reference to origins of the city name), [Nijmegen](#) has been once again a “new market” to “exchange” very nice ideas. We believe that hypergeometric and orthogonal polynomials continue to actively develop, to let another HOPE thrive.

Thanks to generous support of the Dutch Research Council ([NWO](#), project OCENW.KLEIN.006), the Platform Wiskunde Nederland ([PWN](#)), the Geometry and Quantum Theory cluster ([GQT](#)) and the Institute for Mathematics, Astrophysics and Particle Physics ([IMAPP](#)), we had funding to cover local stay of most external participants and we did not charge any conference fee.