

# RECITS Seminar

November 27th, 2024

From 10 a.m. to 11 a.m.

Seminar room, CAM building

Faculty of Mathematics, USTHB.

**Speaker :** Slimane HADJ-BRAHIM,

**Title.** Some formulas of the hypergeometric Bernoulli-Gegenbauer polynomials

## **Abstract.**

We present the novel family of the hypergeometric Bernoulli-Gegenbauer polynomials. This family represents a fascinating fusion between two distinct categories of special functions: truncated Bernoulli polynomials and Gegenbauer polynomials.

We collect some recent results concerning algebraic and differential properties of this class of polynomials and use some them to deduce an ordinary differential equation satisfied by these polynomials.