## Защо да станете изследовател?

Срещи на френски математици с ученици и студенти 2 - 6 юни 2025

#### ПРОГРАМА

## **2 юни**

понеделник

Официално откриване

Лекция на проф. Бернар Тесие в зала "Проф. Марин Дринов" на Българската академия на науките

16:30–18:30 Title. Length, Area, Volume, an overview of their geometry and algebra.

**Abstract.** I will present a number of results on the properties of these measures of geometric objects. A typical one is the isoperimetric inequality relating the length of the bounding curve of a plane domain to the area which it encloses. Another is the characterization of the volume among all possible measures of the size of a convex body in three dimensional space.

#### 3 юни

вторник

13:00–14:30 Посещение на проф. Бернар Тесие в Национална природоматематическа гимназия "Акад. Любомир Чакалов"

16:30-18:30 Лекция на проф. Патрик Попеску-Пампу в зала "Проф. Марин Дринов" на Българската академия на науките

Title. Is there something mystical about hexagons?

Abstract. Pascal discovered in the mid seventeenth century that the three intersection points of opposite sides of a hexagon inscribed in a circle are collinear. This gives rise to a line. But, if one fixes only the vertices and one varies the way to draw the edges of the hexagon, one gets sixty lines! Those lines are not situated randomly, but one gets many concurrent triples. Those intersection points lie in turn in quadruples on new lines... The story continues till one gets a remarkable configuration of 95 points and 95 lines, discovered and explored all along the XIX-th century. Recently, Conway and Ryba revitalized the subject, by finding a remarkable mnemonic way to remember the structure of this configuration (which they called the "mysticum") and a short unified way to prove all its incidence properties. My talk will explain all this, combining mathematics, drawings and history.













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4 ЮНИ	
сряда	
10:30-12:30	Среща на проф. Патрик Попеску-Пампу с ученици и студенти в Институт по математика и информатика – БАН
16:30-18:30	Лекция на проф. Седрик Вилани в зала "Проф. Марин Дринов" на Българската академия на науките

## **5** юни

четвъртък

10:30-12:30 Посещение на проф. Седрик Вилани в Софийска математическа гимназия "Паисий Хилендарски"

16:30-18:30 Лекция на проф. Патрик Попеску-Пампу в зала "Проф. Марин Дринов" на Българската академия на науките

Title. Gerardus Mercator and the art of spiraling straight ahead

**Abstract.** As soon as the compass came into common use in navigation, it became possible to sail the oceans on a constant course, that is, at the same angle to the compass needle. Geometrically, a ship sailing in this way follows curves which, extended indefinitely, spiral around the magnetic poles. How to make a chart that allows us to find easily the course to be followed in order to reach the desired shore? In 1569, the Flemish scientist Gerardus Mercator provided a brilliant answer to this question by publishing a map in which these spirals go straight ahead! We will discuss his method and some related mathematical objects.

### 6 юни

петък

15:00-16:30 Дискусия във Френския институт на тема "Защо да станем изследователи?"











