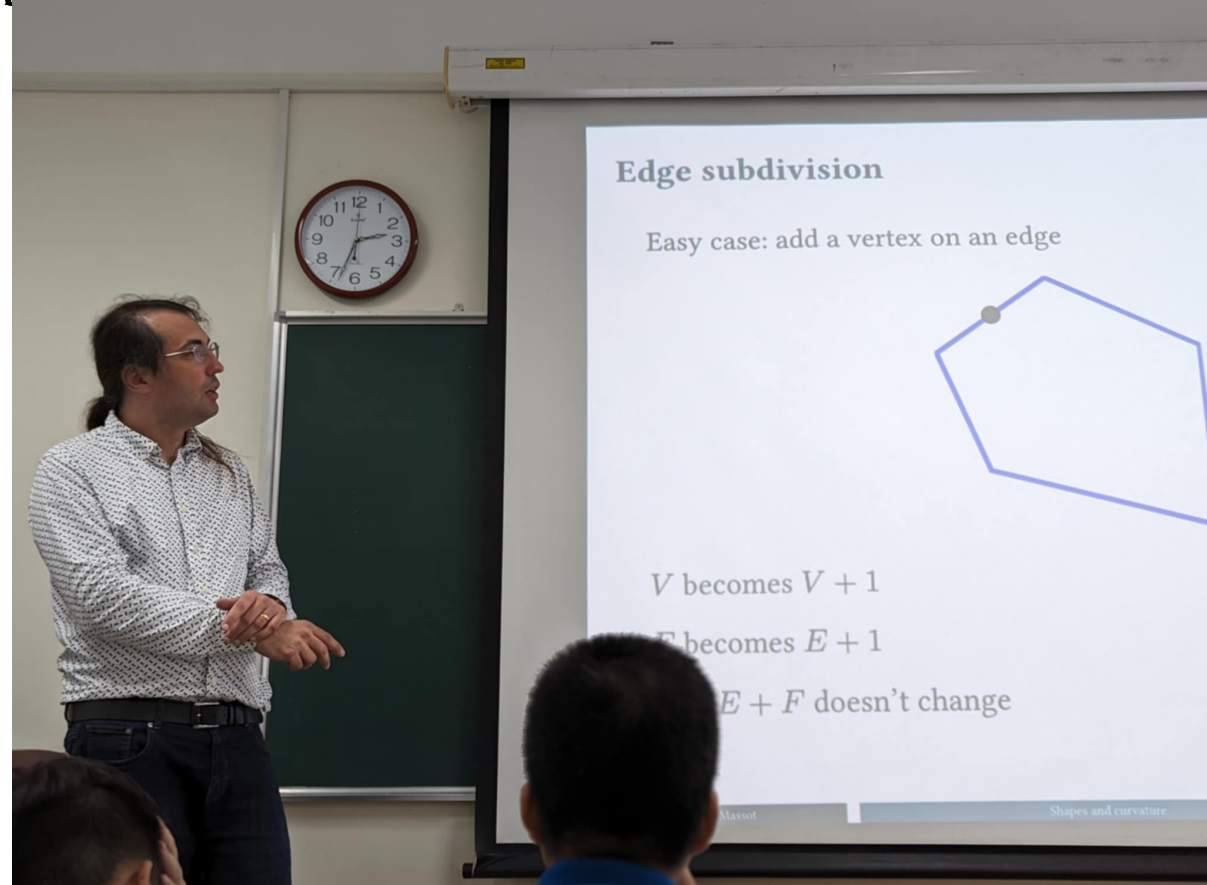
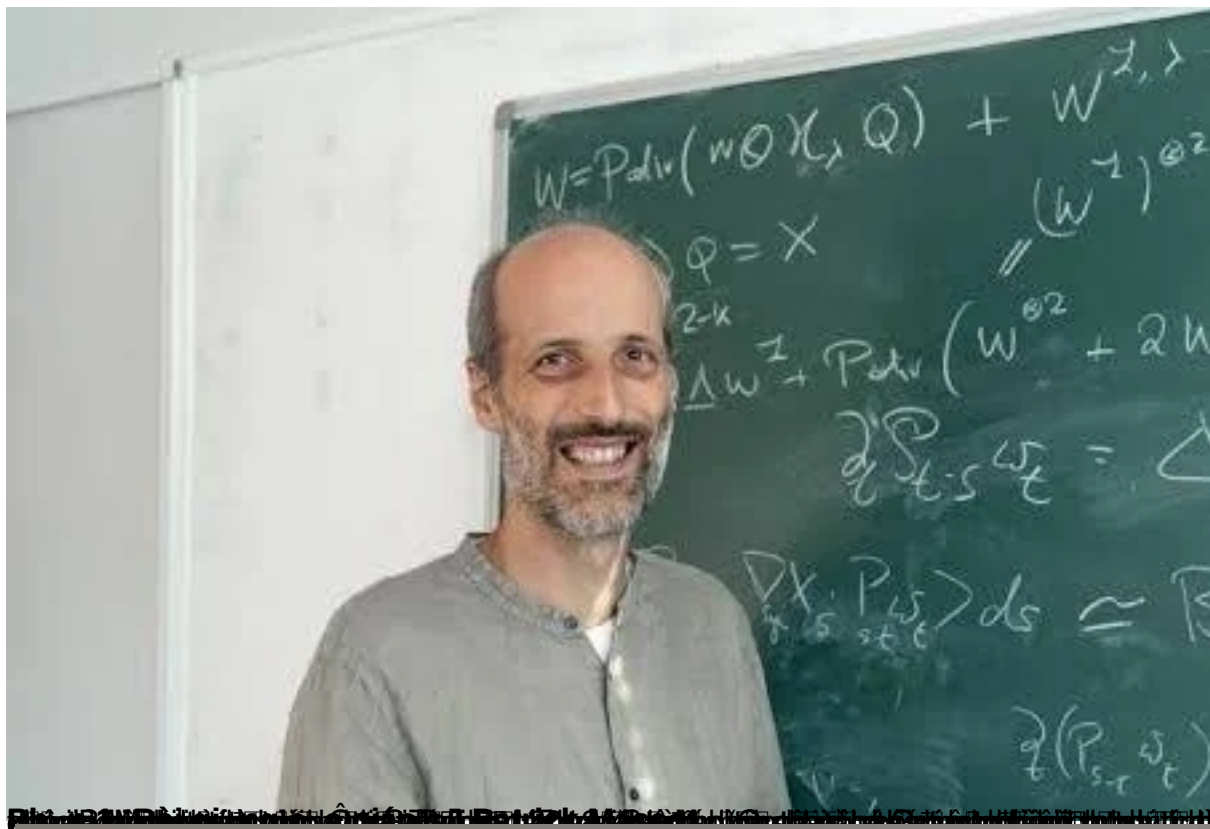


Chiều ngày 25/8/2025, tại Trường THPT Chuyên KHTN (182 Lê Hồng Thọ, Vinh, Hà Nội) đã diễn ra chương trình Public Lectures Series: Mathematics, Art and Creativity, do Viện Toán Cao cấp phối hợp với Trường THPT Chuyên KHTN tổ chức.

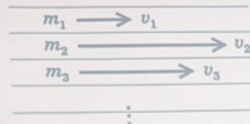




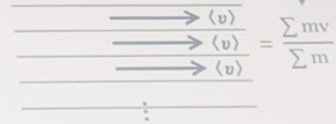
§2 Cauchy-Schwarz

sliding slats in frictional contact

before



after



$\therefore$  momentum conserved

$$= \frac{\sum mv}{\sum m}$$

But *kinetic energy dissipates* :

before

after

$$\sum \frac{1}{2} m v^2 \geq \frac{1}{2} (\sum m) \langle v \rangle^2$$

$$\sum m \sum m v^2 \geq (\sum m v)^2$$

Change variables  $m \rightarrow m^2$   
 $v \rightarrow v/m$  to get

$$\sum m^2 \sum v^2 \geq (\sum m v)^2$$