



DEPARTMENT OF MATHEMATICS

FALL 2022

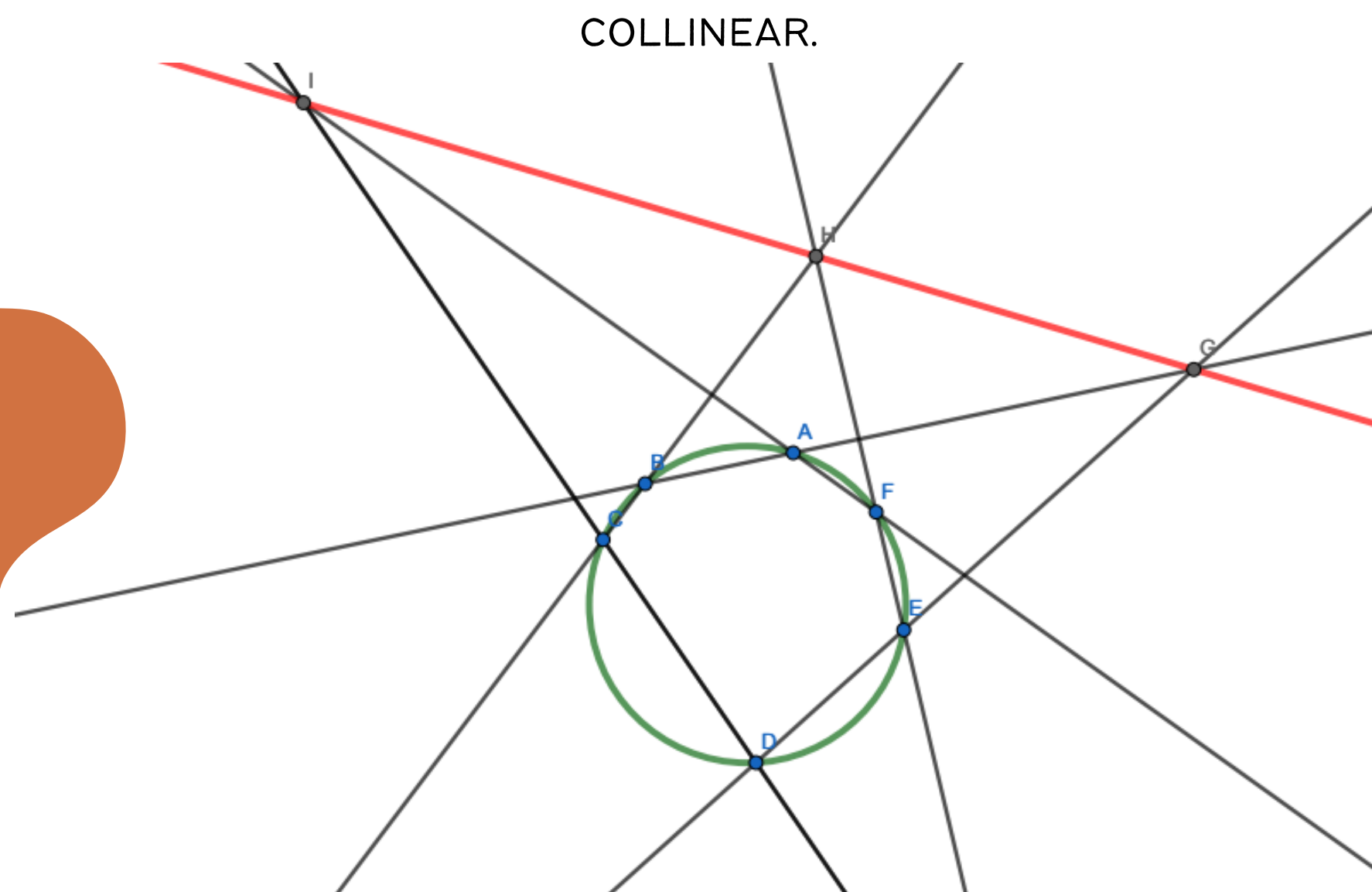
COLLOQUIUM SERIES

PASCAL'S MYSTIC HEXAGON

WITH PETER GOETZ

IN 1640, AT THE AGE OF 16, BLAISE PASCAL, PUBLISHED A SHORT MANUSCRIPT *ESSAI POUR LES CONIQUES* CONTAINING THE FOLLOWING REMARKABLE RESULT:

IF A HEXAGON BE INSCRIBED IN A CIRCLE, THE THREE POINTS IN WHICH THE PAIRS OF OPPOSITE SIDES INTERSECT ARE COLLINEAR.



Thursday,
September 29,
2022

4:00 PM
BSS 166

UNFORTUNATELY, PASCAL'S PROOF WAS NEVER PUBLISHED AND IS LOST TO US. IN THIS TALK, I WILL BEGIN BY ILLUSTRATING THE RESULT USING THE PROGRAM GEOGEBRA. THIS WILL REVEAL THAT THE THEOREM CAN BE UNDERSTOOD USING "PROJECTIONS". SO THE NEXT PART OF THE TALK WILL BE A SHORT INTRODUCTION TO PROJECTIVE GEOMETRY. I WILL CONCLUDE BY GIVING A PROOF OF PASCAL'S THEOREM USING THIS GEOMETRY.

THE TALK WILL BE ACCESSIBLE TO ALL.

FOR MORE INFO GO TO [HTTPS://MATH.HUMBOLDT.EDU/GET-INVOLVED/MATHEMATICS-COLLOQUIUM](https://math.humboldt.edu/get-involved/mathematics-colloquium)
WE CORDIALLY INVITE YOU TO THE PRE-COLLOQUIUM TEA ON THE THIRD FLOOR
OF BSS AT 3:30 PM