Norsk Matematisk Forening (NMF). Innkalling til Årsmøte og Generalforsamling 15/9 2023

Fredag 15/9 avholdes årsmøte i Norsk Matematisk Forening,
Sted: Hotel Terminus, Bergen, https://www.grandterminus.no/
Påmelding innen 12/9, nødvendig for deltakelse i Lunch / Middag:
https://docs.google.com/forms/d/1OFiSEsMTBEEhbxd-NoVgNhsL1HSgwZEbICidHk-MRhQ/

Generalforsamling:
Tid: Fredag 15/9/2023 kl. 16:30
Sted: Hotel Terminus, Bergen
+ Online via Zoom:
https://uit.zoom.us/j/66056495269?pwd=dVRhaGpGRzhRcUR0UnU1ZWxzSUdSUT09
Meeting ID: 660 5649 5269
Password: 889313
Dokumenter for generalforsamlingen: https://web.matematikkforeningen.no/

Program:
Inviterte forelesninger, Hotel Terminus, fra 11:15:

11:15-12:05: Kris Shaw, TBA
12:05-13:00: Lunch.
13:00-13:50: Ragni Piene, "Curve counting and generating functions"
13:50-14:40: Kundan Kumar, "Free Boundary Problems and contributions of Luis Caffarelli, Abel Laureate 2023"
14:40-15:10: Coffee break.
15:10-16:00: Gereon Quick, "On counting and adding points quadratically"
16:30- end : Generalforsamling NMF, Hotel Terminus, Bergen
18:00 Middag, Hotel Terminus, Bergen

Abstrakter:

Kris Shaw, UiO: TBA.

Ragni Piene, UiO: *"Curve counting and generating functions"*
A classical problem in enumerative geometry is to determine how many plane curves of given degree and with given types of singularities pass through some fixed points. For example, there is 1 non-singular cubic passing through 9 points, but 12 singular cubics passing through 8 points. Such curve counting problems have received new attention because of their appearance in string theory in theoretical physics.

There is currently no closed formula solution to the above general problem. However, as I will explain, in some cases one can determine the generating function: a formal power series whose coefficients are the desired solutions.

Kundan Kumar, UIB:
"Free Boundary Problems and contributions of Luis Caffarelli, Abel Laureate 2023"
Abstract: Luis Caffarelli, recipient of the Abel Prize 2023, is one of the most prolific (>350 papers with 150 collaborators) and outstanding mathematicians (having received several prizes including 2018 Shaw Prize) of current times. His main field is in the regularity of solutions for partial differential equations (PDEs) and he has made deep contributions to several areas of PDEs including free boundary problems, fully nonlinear equations, homogenization, and nonlocal equations. I will introduce Free Boundary Problems and briefly discuss his contributions in this area.

Gereon Quick, NTNU: *"On counting and adding points quadratically"*

Abstract: The Brouwer degree of a map is a classical and fundamental invariant in topology. It may be defined by counting points in the fiber. By taking additional algebraic information of maps into account one can define a Brouwer degree in algebraic geometry. In my talk I will introduce the ideas and computations relevant for an algebraic Brouwer degree and will discuss why this is important. I will then report on joint work with Viktor Balch Barth, William Hornslien and Glen Matthew Wilson on how one can make certain abstractly defined group structures very explicit. My focus will be on presenting a general picture rather than the details.