



Given Any Five Cards

Wednesday, May 19, 2021 — 6:00–7:00 PM

Zoom ID 922 7125 3913 and the [Zoom Link](#).

If you use Zoom ID rather than the Zoom link then please contact Vladimir Chernov
(vladimir.chernov@dartmouth.edu) for the password.

ABSTRACT: One of the most astonishing mathematical card tricks ever invented dates back over 70 years: given any five cards from a regular deck, it is possible to show just four of them to a friend and magically convey the identity of the fifth. It is also possible to switch one of the five cards for a different card in such a way that the friend knows which card is new, AND which old one was jettisoned. It's even possible to show the friend fewer than four cards and have her ID the missing ones, if you play your cards right. We will survey a variety of “Given Any Five Cards” scenarios, explaining the diverse mathematical principles involved, as well as “Given Any Four Cards” and even “Given Any Three Cards” counterparts.



Colm Mulcahy

Professor Emeritus of Mathematics
Spelman College

“Mathematics may be presented in polished logical form, but it's discovered and mastered in a totally different, sometimes semi-haphazard way, with plenty of false turns, dead ends and much frustration and self-doubt.”

For more information:

<https://math.dartmouth.edu>