2021 Mathy Bracket Contest

tl;dr Join Dr. Roling’s no-stakes bracket game. The scoring’s unusual. Fill out this very short Google Form to get on the interest list and Dr. Roling will send you a fillable bracket and instructions once the bracket is ready: <https://forms.gle/eTdgMHZfU7HM9abr5>

Feel underappreciated year after year for your successful upset picks? Do you want to be appropriately awarded for your risks? Join Dr. Roling’s awesome **mathematically-balanced NCAA bracket game**! Open to chemical engineering undergraduate students, graduate students, faculty, staff, and their affiliates (significant others, kids, etc.). There is **no cost to enter**, but great honor for the winners!

**Concept**: The greater the risk you take, the greater the reward. Pick an 8 seed to win in the first round (which happens 48.6% of the time)? Take 2.06 points (1/0.486) if you're right. Pick that 8 seed to win again in the next round? Take 10.8 points. Pick a 1 seed to win in the first round? That's worth only 1.01 points. All risks are appropriately weighted, so feel free to go a bit crazy! The maximum number of points you can earn is dictated by how risky you are; safer picks have a lower ceiling.

*Nitty gritty*: The expectation value of points awarded for each of the 63 games is 1.000, based on historical win probabilities for each seed in the given round. The points awarded for a successful pick is therefore 1/*p*, where *p* is the historical chance of a team with a given seed making the given round. (50% chance => 2 points.) Choose an event that hasn't happened before (e.g., a 16 seed winning a second game, or a 12 seed making the Final Four) and you'll get 10,000 points (representing an "infinite" amount, for practical purposes in this competition). You can certainly pick multiple 10,000 point events. All likelihoods are based on the historical success of seeds in the NCAA tournament since the 64-team expansion in 1985.

**How to play**: Fill out this super short form (<https://forms.gle/eTdgMHZfU7HM9abr5>) ASAP to get on the interest list. Dr. Roling will send out a fillable Excel bracket with detailed instructions after this year’s field is released on March 14. You’ll then be able to upload your completed spreadsheet before the deadline on the morning of March 18. Dr. Roling will send you info about how to access your score and the group standings.

**A sample bracket** (from 2019) is attached to this email, in case you’d like to see how it works. Simply make all picks from the dropdown menus in the highlighted cells. The points possible for your pick will display once you make a choice. A scoring matrix is also provided on the other worksheet tab.

Results will be posted, so **please be aware that your name and affiliation (and corresponding accolades/shame) will be made public**!