

Springborn's variation on the Farey theme and exceptional slopes

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In 2024 Boris Springborn introduced the notion of the Markov fractions by ingeniously modifying the Farey mediant. I will show that the Markov fractions are precisely the slopes of the exceptional vector bundles on \mathbb{P}^2 studied in 1980s by Drèzet and Le Potier and by Rudakov. In particular, this provides a simpler proof of Rudakov's result claiming that the ranks of the exceptional bundles on \mathbb{P}^2 are Markov numbers.