Doughnuts and Ice Cream Cones: Sweet Mathematics

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Journal of Humanistic Mathematics has so far published three special issues: Volume 6 Issue 1 (January 2016) was our Special Issue on The Nature and Experience of Mathematical Beauty; Volume 8 Issue 2 (July 2018) was our Special Issue on Mathematics and Motherhood; and Volume 10 Issue 2 (July 2020) was our Special Issue on Creativity in Mathematics. This summer issue is our fourth special issue. Guest edited by Catherine Buell and Victor Piercey, this Special Issue on Ethics in Mathematics offers our readers eleven outstanding articles on philosophical and practical discourses on the theme. You can read more about these articles in the guest editors' foreword.

Our issue begins with but does not end with these Ethics in Mathematics articles! As you scroll down our main page or table of contents, you will also find a selection of eclectic essays, two neat short stories, some exquisite poetry, as well as a new Open Call for Poetry to round out the issue.

COVID continues to be a presence in our lives, and this issue brings us three articles on this theme. Jane Friedman starts us off by showing how pandemic data can be used to help students understand both exponential growth and social justice concerns. Keith Gallagher and Whitney George then take a look at survey data from 43 students enrolled in an asynchronous online Precalculus course to identify strategies for moving students towards active learning. Finally, Zareen Rahman, Rani Satyam, and Younggon Bae reflect on ways mathematics educators can better prepare their courses during COVID-19.

Our World of Mathematics section starts off with Ruža Jeličić, who introduces us mathematically and philosophically to the notion of a point.

Next Raffaella Mulas discusses the influence that Cantor's set theory had of the work of Jorge Luis Borges.

David L. Neel then treats us to an almost poetic exploration of the history of mathematics focusing on Euclidean and non-Euclidean geometry, organized by the Fano Plane. Andrew Granville broadens the theme and explores commonalities between the questions: what makes great art and what makes great mathematics?

Next Cacey L. Wells considers fractal geometry as a framework to think about the mathematics classroom. Alan Von Herrmann, together with Jeneva Clark, shares his experiences with peer instruction in his calculus III classes. Hsueh-Chen Lee then offers us two winning entries from a creative writing competition for college students that combine mathematics and literature.

In this issue we have three exciting activities for you! Valery Ochkov and Yulia V. Chudova get us started by exploring some optimization problems involving hats and ice cream. Edward Vogel and My Tram then offer us an introduction to the Soma Cube, a three-dimensional solid splitting adventure. Soumya Banerjee then presents resources and computing ideas for students to explore the Ramanujan cab numbers.

Peter Appelbaum, Charoula Stathopoulou, and Constantinos Xenofontos argue in a perspective essay for immediate changes in mathematics education.

Our poetry section begins with a multipart piece by Kevin Farey advocating for religious tolerance and racial equality using mathematical imagery. Evandro il Cinico follows with an ode to delta, while John Donoghue explores math's most beautiful expression. Deborah Coy muses about doughnuts and infinities. Jules Nyquist follows with a reflection on measurement and zero. Josh Hiller feels the pain of love through topology.

Vijay Fafat brings us our first fiction piece, a contemplation of the unintended consequences of a first-order approximation. Tom Blackford then spins the tale of a young girl whose imaginary friend is somewhat more ubiquitous than expected.

We end this issue with a call for poetry. We love π, you love π, but what about all the other wonderful constants in mathematics? We are putting out a call for poetry about constants other than our favorite half-circle treat.

We hope you'll enjoy the many different flavors of humanistic mathematics that found their way into this summer issue!