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BSJ

Fall 2015

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## C O N T A C T /kōn'tākt'/

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Dear Reader,

I am proud to present the Fall 2015 issue of the Berkeley Scientific Journal, based around the theme of “Symmetry.” In our discussion to decide this semester’s theme, one writer intelligently noted that much of science can broadly be characterized as a search for patterns and sense in a seemingly chaotic universe. However, a select few patterns can be characterized with that elusive term of “symmetry.” Symmetry is a concept that has fascinated humans for millennia. Ancient Greek philosophers like Aristotle famously held symmetry in the highest regard, believing symmetry to be one of the three “ingredients” to beauty. We see and prize symmetry in nature, from our appreciation of symmetric flowers to our natural attraction to symmetric images. And we artificially create symmetry, whether it be in the form of symmetric architecture or the symmetric form of famous literary works like Beowulf. This semester, our staff searched for elusive symmetry in the vast body of knowledge science has granted us over the years, and the results are sure to enthrall you and help you rethink symmetry in a new light.

In this latest issue, we explore symmetry through a combination of original review articles and interviews with Cal professors. We have an article relating symmetry to visual appeal [7], and the use of symmetry to treat chronic pain [10]. Also featured is an article discussing fractal geometry in tumors [18], and the use of computations to find a cure for cancer [12]. And our features section also includes a piece on the origins of chirality [1], and a discussion of ferroelectric thin films [3]. Our first interview features Hitooshi Murayama, a theoretical particle physicist, on the topic of supersymmetry, as it relates to the Standard Model of particle physics [21]. We also have an interview with chemistry professor Kenneth Raymond, whose lab researches supramolecular coordination chemistry, specifically the formation of symmetrical coordination clusters [35]. We are also proud to feature original academic research submitted by Cal undergraduates studying neuronal cell types [40].

Go Bears!

Ali Palla  
Editor-in-Chief

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