Department of Mathematics
Spring 2017 Colloquium Series

"The Electoral College vs. The Popular Vote or Balinski and Young vs. Kenneth Arrow"

Charlie Biles,
Humboldt State University

Thursday, February 23, 2017

Behavioral and Social Sciences Building Room 204, 4 pm

The election of Donald Trump as President of the U. S. has re-ignited the Electoral College controversy since Hillary Clinton won a plurality of the popular vote. A key problem in any election is to utilize a fair method to determine who wins. The electoral system is dependent on the decennial congressional apportionment. The 1982 theorem of Michel Balinski and H. Peyton Young presents intrinsic fairness limitations with congressional apportionment that diffuse into the electoral system. Advocates of change want to replace the electoral system with the popular vote. However, what is the popular vote? Kenneth Arrow won the 1972 Nobel Prize in economics for his theorem proving intrinsic fairness limitations in a popular vote system involving a multi-option ballot with three or more choices. The 1876 presidential election featuring Rutherford Hayes vs. Samuel Tilden and the 2000 election featuring George W. Bush vs. Al Gore present fascinating consequences of the electoral system as a fair system. The 2016 Trump vs. Clinton election presents fascinating consequences of the popular vote as a fair system. Come to the Colloquium and be fascinated!

Dr. Biles is an emeritus professor of mathematics from HSU. He especially enjoys his fabulous wife Carolyn and engaging in his current area of research, history of congressional apportionment.

To view this poster online, go to http://www.humboldt.edu/math/news-and-events/math-colloquium

We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS

building at 3:30 pm on Thursday.