Sociedad de Estadística e Investigación Operativa

La Sociedad de Estadística e Investigación Operativa, SEIO, tiene el placer de invitarle a su primer seminario online, titulado:

From the Nightingale chart to compositional biplots

Impartido por el profesor
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El seminario tendrá lugar el próximo jueves,
11 de marzo de 17:30h a 18:30h (UTC/GMT +1 hora)
a través de la aplicación Zoom.

Se precisa inscripción anticipada, a través de este enlace:
https://us02web.zoom.us/meeting/register/tZIvf-qhrjsjE91bKndS-1c0FpUe3LfwdZCP
Tras el registro, recibirá un email de confirmación con información sobre el seminario.

El seminario se impartirá en Español, pudiendo encontrar más información sobre la temática y sus autores en el reverso de esta invitación.

Esperando contar con su presencia, reciba un cordial saludo

Jesús López Fidalgo
Presidente de la SEIO.

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From the Nightingale chart to compositional biplots

RESUMEN: Among the remarkable merits of Florence Nightingale(1820-1910) the introduction of her chart presenting casualty data of the Crimea War (1854-1856) is notorious. Her intention was to show to politicians and public in general that most deaths were avoidable taking measures of hygiene and care, in front of deaths caused by war wounds or other causes. Remarkably, the chart —that she called coxcomb and is nowadays known as polar area diagram— takes into account two important points in any statistical research: The research question and the characteristics of the available data. The data presentation on a polar plot accounts for seasonality; although major attention is paid to avoidable deaths, they are always compared to other causes of death, thus inviting to a multivariate analysis, where both proportions of types of deaths and their total are considered. This suggests a discussion on the sample space of the data. Available log-ratio approaches for the analysis of compositional data allow an alternative presentation emphasizing the ratios between the different components, but not forgetting the total number of casualties. The compositional biplot including the total of the components is, maybe, the richest representation in the context of compositional data analysis.

SOBRE LOS AUTORES:

Juan Jose Egozcue: He studied Physics at the University of Barcelona (Spain). He obtained his PhD in 1982. In 1978 he got lecturer in the Civil Engineering School (U. Politècnica de Catalunya, UPC, Barcelona, Spain), teaching subjects on Applied Mathematics and Statistics. He became Full Professor at UPC in 1989. Present main research activity: Bayesian methods for natural hazard assessment; and analysis of compositional data, with special emphasis in the geometry of the sample space. After retirement in 2016, he became Emeritus Professor at UPC and President of the CoDa-Association.

Vera Pawlowsky-Glahn: She studied Mathematics at the University of Barcelona (Spain) and received her PhD from the Free University Berlin (Germany) in 1986. Back to Spain, she was professor at UPC in Barcelona and later professor of Statistics with the University of Girona. Since 1982 her main research field is the statistical analysis of compositional data, with special emphasis in the algebraic geometric structure of the sample space. She has published numerous articles, proceedings and books on this topic. She was President of IAMG 2008-2012 and President of the CoDa-Association 2015-2017. She is since November 1, 2018 Emeritus Professor at the University of Girona, Spain.

ADVERTENCIA: el contenido y material de este seminario es el mismo que el presentado en el Seminario del Departamento de Estadística e Investigación Operativa (EIO) de la Universitat Politècnica de Catalunya el día 26 de febrero de 2021.