

**Title:** Semiring varieties related to closure congruences of Green's relations

**Author(s):** Xuliang Xian, Yong Shao and Siniša Crvenković

In this paper, we consider the closure congruences of Green's relations on the reducts of semirings. A method of generating a congruence with an arbitrary relation on a semiring is presented. Some connections between various congruences on semirings are given and discussed. Several varieties of semirings defined by the closure congruences are characterized and described.

**Address:**

Xuliang Xian  
School of Mathematics  
Northwest University  
Xi'an, Shaanxi, 710127  
P. R. China

**Address:**

Yong Shao  
School of Mathematics  
Northwest University  
Xi'an, Shaanxi, 710127  
P. R. China

**Address:**

Siniša Crvenković  
Department of Mathematics  
and Informatics  
University of Novi Sad  
Serbia