Semiring varieties related to closure congruences of Green's relations

By XULIANG XIAN (Xi'an), YONG SHAO (Xi'an) and SINIŠA CRVENKOVIĆ (Novi Sad)

Abstract. 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.

XULIANG XIAN &
YONG SHAO
SCHOOL OF MATHEMATICS
NORTHWEST UNIVERSITY
XI'AN, SHAANXI, 710127
P. R. CHINA

SINIŠA CRVENKOVIĆ
DEPARTMENT OF MATHEMATICS
AND INFORMATICS
UNIVERSITY OF NOVI SAD
SERBIA