Sun Kim* (ssunny8079@hanmail.net). Ramanujan’s modular equations and colored partition identities.

Ramanujan’s modular equations of prime degrees 3, 5, 11, 7 and 23 are associated with elegant colored partition theorems. In 2005, S. O. Warnaar established a general identity which implies the modular equations of degrees 3 and 7. In this talk, we discuss a generalization of the remaining modular equations of degrees 5, 11 and 23. We also derive many other partition identities from this generalization. (Received September 10, 2018)