1135-AD-885 **Jieon Kim*** (`jieonkim7@gmai.com`), 1104-ho, 146, Surim-ro72beon-gil,Geumjeong-gu, Busan, Busan 46242. *Quandle coloring invriants of knots and surface-knots.* Preliminary report.

A knot is an embedding of a circle S^1 in $\mathbb{R}^3$. Two knots are equivalent if one can be transformed into the other via a deformation of $\mathbb{R}^3$ upon itself. A surface-knot is an embedding of a surface in $BbbR^4$. Two surface-knots are equivalent if one can be transformed into the other via a deformation of $\mathbb{R}^4$ upon itself. A quandle is an algebraic structure with a binary operation satisfying certain conditions derived from Reidemeister moves which are local moves of knot diagrams. In this talk, I'll introduce invariants of links and surface-links, called quandle coloring invariants. (Received September 16, 2017)