
In this talk, we introduce the twisted Kähler-Ricci Hermitian Yang-Mills flow on a compact Kähler manifold.

\[
\begin{align*}
\frac{\partial}{\partial t} g &= -\text{Ric}(g) + F_A; \\
\frac{\partial}{\partial t} A &= -d^* F
\end{align*}
\]

The interest in this coupled flow lies in the fact that its fixed points will have constant scalar curvature metrics. In this talk we will discuss its short time existence and under which conditions it has long time existence. (Received September 15, 2014)