1167-17-117 **Kailash Chandra Misra** (misra@ncsu.edu), Department of Mathematics, North Carolina State University, Raleigh, NC 27695, and **Suchada Pongprasert***, Department of Mathematics, Faculty of Science, Srinakharinwirot University, Bangkok, 10110, Thailand. *$D_6^{(1)}$-geometric crystal at spin node and its ultra-discretization.*

Let $\mathfrak{g}$ be an affine Lie algebra with index set $I = \{0, 1, 2, \ldots, n\}$ and $\mathfrak{g}^L$ be its Langlands dual. It is conjectured that for each Dynkin node $k \in I \setminus \{0\}$ the affine Lie algebra $\mathfrak{g}$ has a positive geometric crystal whose ultra-discretization is isomorphic to the limit of certain coherent family of perfect crystals for $\mathfrak{g}^L$. We prove this conjecture for $k = 6$ and $\mathfrak{g} = D_6^{(1)}$. (Received March 01, 2021)