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**Chuu-Lian Terng**, Department of Mathematics, University of California at Irvine, Irvine, CA 92697, and **Zhiwei Wu\*** ([wuzhiwei@nbu.edu.cn](mailto:wuzhiwei@nbu.edu.cn)), Faculty of Science, Ningbo University, Ningbo, Zhejiang 315211, Peoples Rep of China. *Isotropic curve flows on  $\mathbb{R}^{n+1,n}$ .*

In this talk, we will give a systematic way to construct hierarchies of isotropic curve flows, which give natural geometric interpretations of the KdV-type hierarchies associated to the affine Kac-Moody algebra  $\hat{B}_n^{(1)}$  and  $\hat{A}_{2n}^{(2)}$ . Bi-Hamiltonian structures and conservation laws for isotropic curve flows are given. And we will also construct Bäcklund transformations for these curve flows and give an algorithm to construct infinitely many families of explicit solutions. (Received August 29, 2016)