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**Jinping Zhuge\*** ([jpzhuge@math.uchicago.edu](mailto:jpzhuge@math.uchicago.edu)). *Weak maximum principle for biharmonic equations in quasiconvex Lipschitz domains.*

In dimension two or three, the weak maximum principle for biharmonic equation is valid in any bounded Lipschitz domains. In higher dimensions (greater than three), it was only known that the weak maximum principle holds in convex domains or  $C^1$  domains, and may fail in general Lipschitz domains. In this talk, we will show the weak maximum principle in higher dimensions in quasiconvex Lipschitz domains, which is a sharp condition in some sense and recovers both convex and  $C^1$  domains. The main ingredient is a reverse Hölder inequality in quasiconvex domains proved by a real variable argument. (Received September 10, 2019)