A sliding mode control scheme for trajectory tracking control of mechanical systems, subject to quantization and event trigger, is established. Upper bounds of the induced quasi-sliding mode are obtained. It is shown that the proposed method guarantees uniform ultimate boundedness of the tracking error, and obtains a minimal time between consecutive executions of the control task. An example is presented.

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MSC:
93B12 Variable structure systems
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70Q05 Control of mechanical systems

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