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### ACCEPTED MANUSCRIPT

# Enhancement of heat transfer in a rectangular channel with perforated baffles

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#### **Highlights:**

- The performance of a new baffle design in the channel is numerically investigated.
- The design concerns a perforated baffle having a row of four holes placed at three different positions.
- The Reynolds number is ranging from  $10^4$  to  $10^5$ .
- A great enhancement of the heat transfer is obtained with the perforated baffle compared to the simple baffle.

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