

# Nonparametric estimation of log-concave densities

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by

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## **Abstract:**

I will review recent progress concerning nonparametric estimation of log-concave densities and related families in  $R^1$  and  $R^d$ . In the case of  $R^1$ , I will present limit theory for the estimators at fixed points at which the population density has a non-zero second derivative and for the resulting natural mode estimator under a corresponding hypothesis. In the case of  $R^d$  with  $d \geq 2$  will briefly discuss some recent progress and sketch a variety of open problems.