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**Usage of spline interpolation in
catheter-based cardiac mapping**

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Abstract: Due to their minimal invasiveness catheters are highly preferred in cardiac mapping techniques used in the source localization of rhythm disturbances in the heart. In cardiac mapping, standard steerable catheters and multielectrode basket catheters are the two alternatives for the characterization of the underlying tissue on the inner (endocardium) and outer (epicardium) surfaces of the heart. As

with any discrete sampling technique, an important question for catheter-based cardiac mapping is how to determine values at locations from which direct measurements are not available. Interpolation is the most common approach for providing values at unmeasured sites using the available measurements. In this