## Harmonic Functions on Trees

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The mean value property is one of the most important properties of harmonic functions, which says that the average value of a function over any admissible ball is equal to the value of the function at the center of the ball. Using the mean value property we define strongly and weakly harmonic functions on metric measure spaces.

We will see what conditions have to be met for a function to be harmonic on a tree and we will see some interesting examples of such functions. We will also investigate connections between the harmonic functions defined by the mean value property and others already considered in the literature.