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Sommario/riassunto	This Special Issue focuses on recent progress in a new area of mathematical physics and applied analysis, namely, on nonlinear partial differential equations on metric graphs and branched networks. Graphs represent a system of edges connected at one or more branching points (vertices). The connection rule determines the graph topology. When the edges can be assigned a length and the wave functions on the edges are defined in metric spaces, the graph is called a metric graph. Evolution equations on metric graphs have attracted much attention as effective tools for the modeling of particle and wave dynamics in branched structures and networks. Since branched structures and networks appear in different areas of contemporary physics with many applications in electronics, biology, material science, and nanotechnology, the development of effective modeling tools is important for the many practical problems arising in these areas. The list of important problems includes searches for standing waves, exploring of their properties (e.g., stability and asymptotic behavior), and scattering dynamics. This Special Issue is a representative sample of the works devoted to the solutions of these and other problems.