**Graphical TOC/Abstract**

Space classification for indoor pedestrian navigation with morphological and functional characteristics

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The letter proposes a method for classifying indoor navigation spaces based on their morphological and functional characteristics, improving the representation of complex indoor structures in topological network models. This approach classifies indoor navigation spaces into corridors or open spaces, which are suitable to be represented by median axis models or visual graphs respectively, addressing the limitations of width-based parameters. Indoor map experiments confirmed the method's effectiveness in identifying various types of corridors and open spaces in complex indoor settings.

