



Dr. Qian Liang

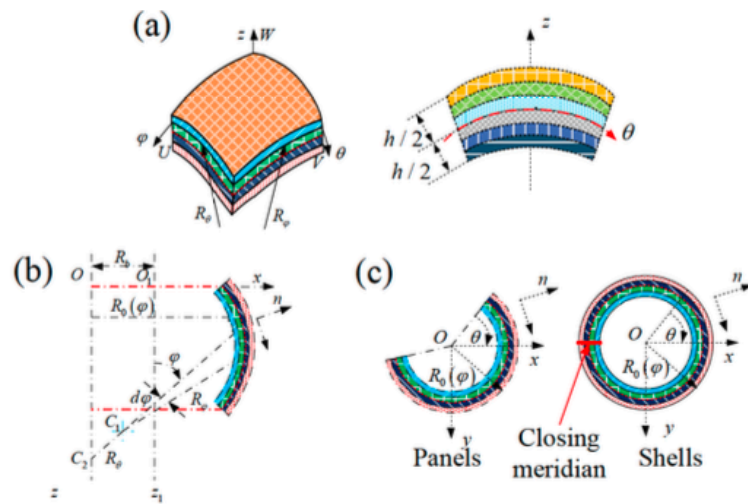


Figure 1: The geometric parameters and coordinate system of a composite laminated shell: (a) the differential element of the composite laminated shell; (b) the spherical shell coordinate system; (c) circumferential section of the composite laminated shell.

From: Qingshan Wang, Dongyan Shi, Fuzhen Pang and Qian Liang, “Vibrations of composite laminated circular panels and shells of revolution with general elastic boundary conditions via Fourier-Ritz method”, *Curved and Layered Structures*, Vol. 3, No. 1, pp 105-136, April 2016

See:

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Selected Publications:

Qingshan Wang, Dongyan Shi, Fuzhen Pang and Qian Liang, “Vibrations of composite laminated circular panels and shells of revolution with general elastic boundary conditions via Fourier-Ritz method”, *Curved and Layered Structures*, Vol. 3, No. 1, pp 105-136, April 2016

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- Qingshan Wang, Dongyan Shi, Qian Liang and Fuzhen Pang, "A unified solution for vibration analysis of moderately thick, functionally graded rectangular plates with general boundary restraints and internal line supports", *Mechanics of Advanced Materials and Structures*, Vol. 24, No. 11, pp 943-961, 2017
- Qingshan Wang, Bin Qin, Dongyan Shi and Qian Liang, "A semi-analytical method for vibration analysis of functionally graded carbon nanotube reinforced composite doubly-curved panels and shells of revolution", *Composite Structures*, Vol. 174, pp 87-109, August 2017
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- D. Shi, Q. Liang, Q. Wang, and X. Teng, "A unified solution for free vibration of orthotropic circular, annular and sector plates with general boundary conditions," *Journal of Vibroengineering*, vol. 18, no. 5, pp. 3138–3152, 2016.
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