

SCMS Seminar



BASES OF CLUSTER ALGEBRAS, CATEGORIFICATION, AND TROPICALIZATION

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Time: 13:30-14:30, Thursday, May 23rd, 2019

Venue: Room 104, Shanghai Center for Mathematical Sciences

Abstract: We review the triangular basis of quantum cluster algebras. We further explain its relation to categorification and tropical geometry.

$$k_3 = hf(x_{i-1} + \frac{h}{2}, y_{i-1} + \frac{k_2^{(i-1)}}{2})$$
$$\frac{b_i - (\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)})}{x_{i+1}^{a_{ii}} b_i - (\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)})}$$
$$\Delta y_i = \int_{x_i}^{x_{k+1}} y' dx = \int_{x_k}^{x_{k+1}} y' dx = y(x)$$
$$\int_{x_k}^{x_{k+1}} f(x, y) dx = \int_{x_k}^{x_{k+1}} y' dx = y(x)$$
$$\sqrt{(y_n + 0.5\tau k_1)^2 + (t_n + 0.5\tau)^2}$$