

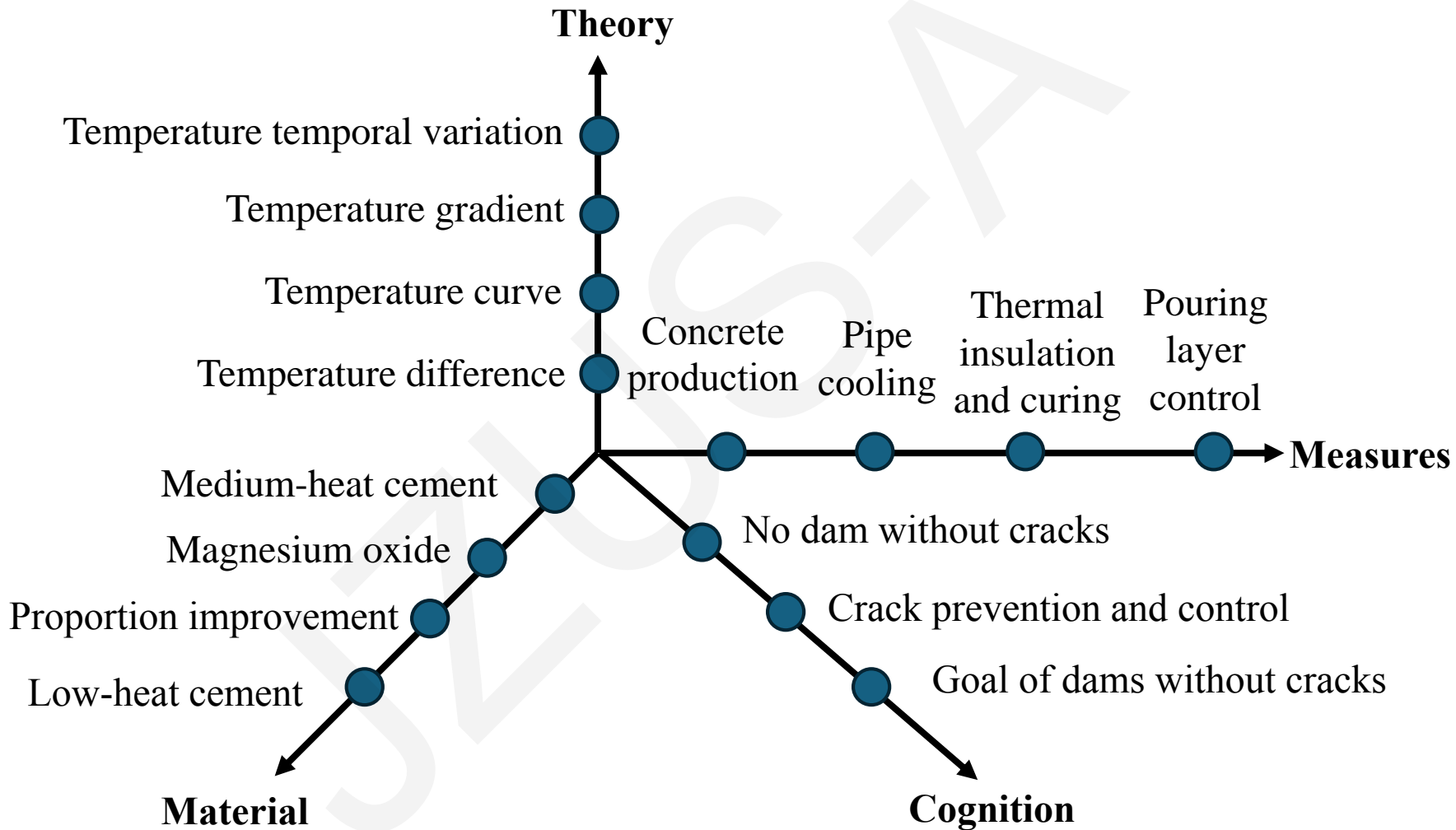
Thermal anti-cracking safety control for concrete dams

Qixiang FAN, Zeyu NING, Peng LIN, Wenfu CHEN, Guo LI

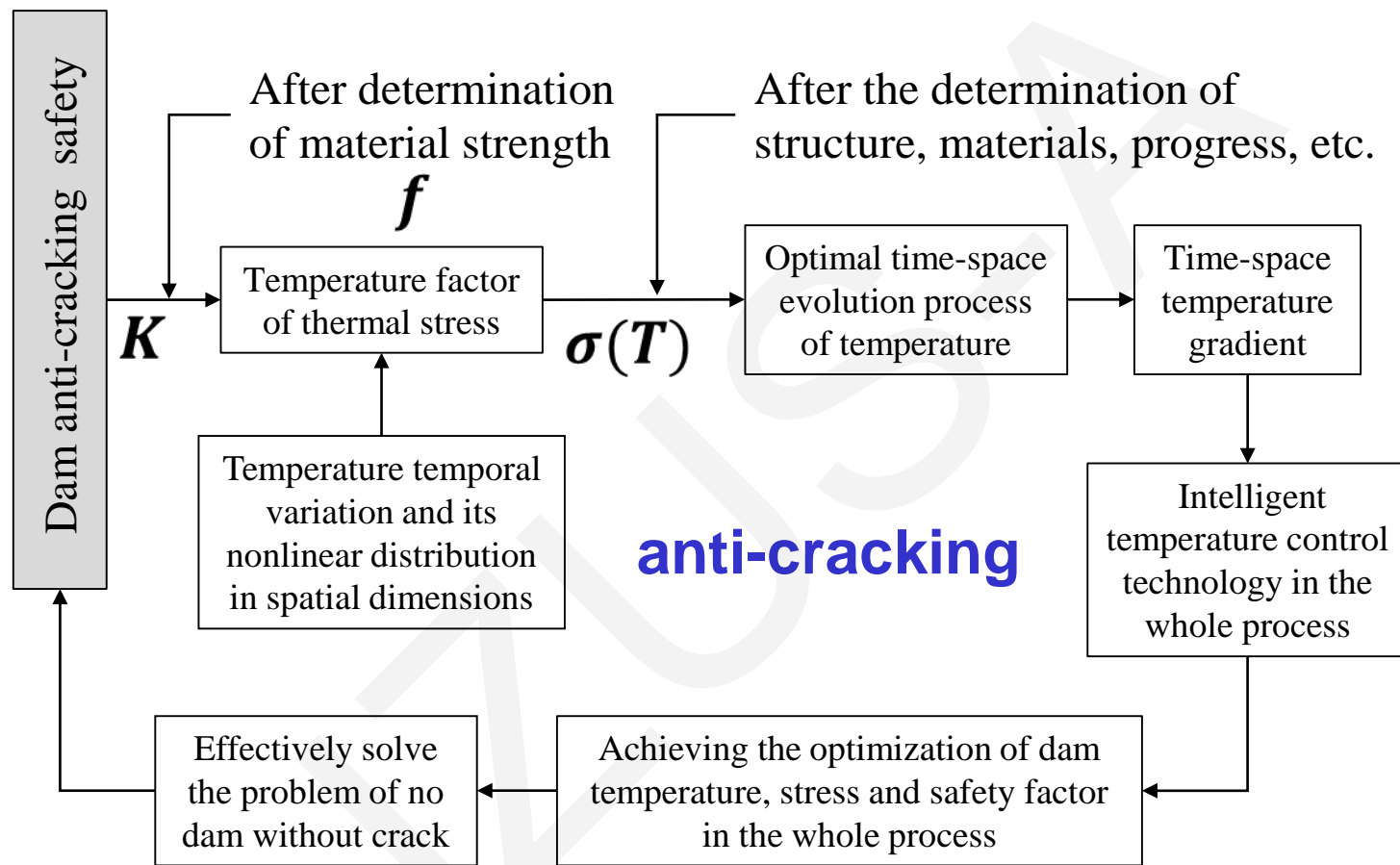
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<https://doi.org/10.1631/jzus.A2500049>

Development History

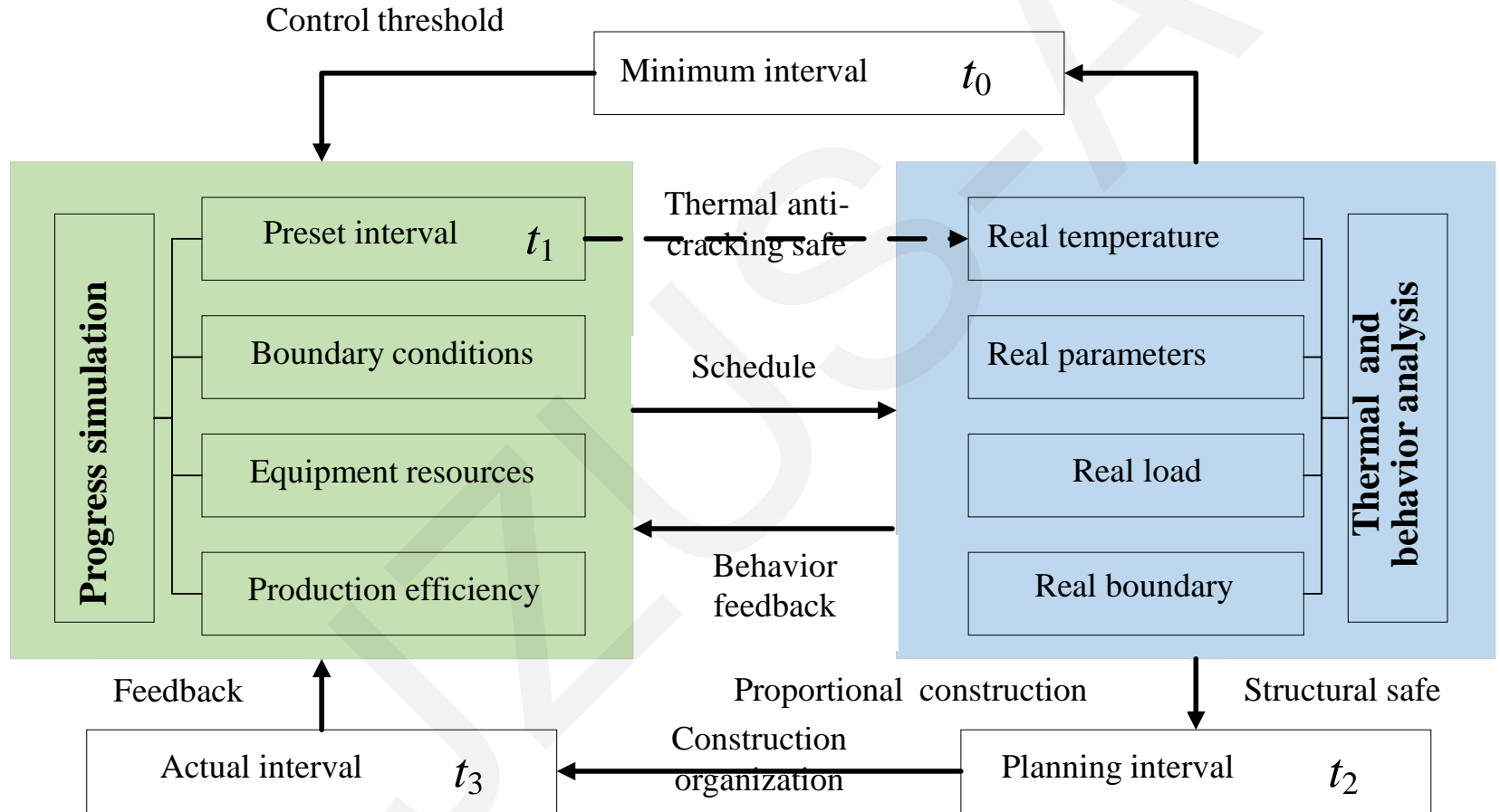


Mechanism study



Qixiang FAN, Zeyu NING , Peng LIN et al. Real thermal anti-cracking safety evaluation method for concrete dams considering spatio-temporal characteristics .Advances in concrete construction, 2025, 19(5):321-334. DOI:10.12989/acc.2025.19.5.321.

Coupling simulation

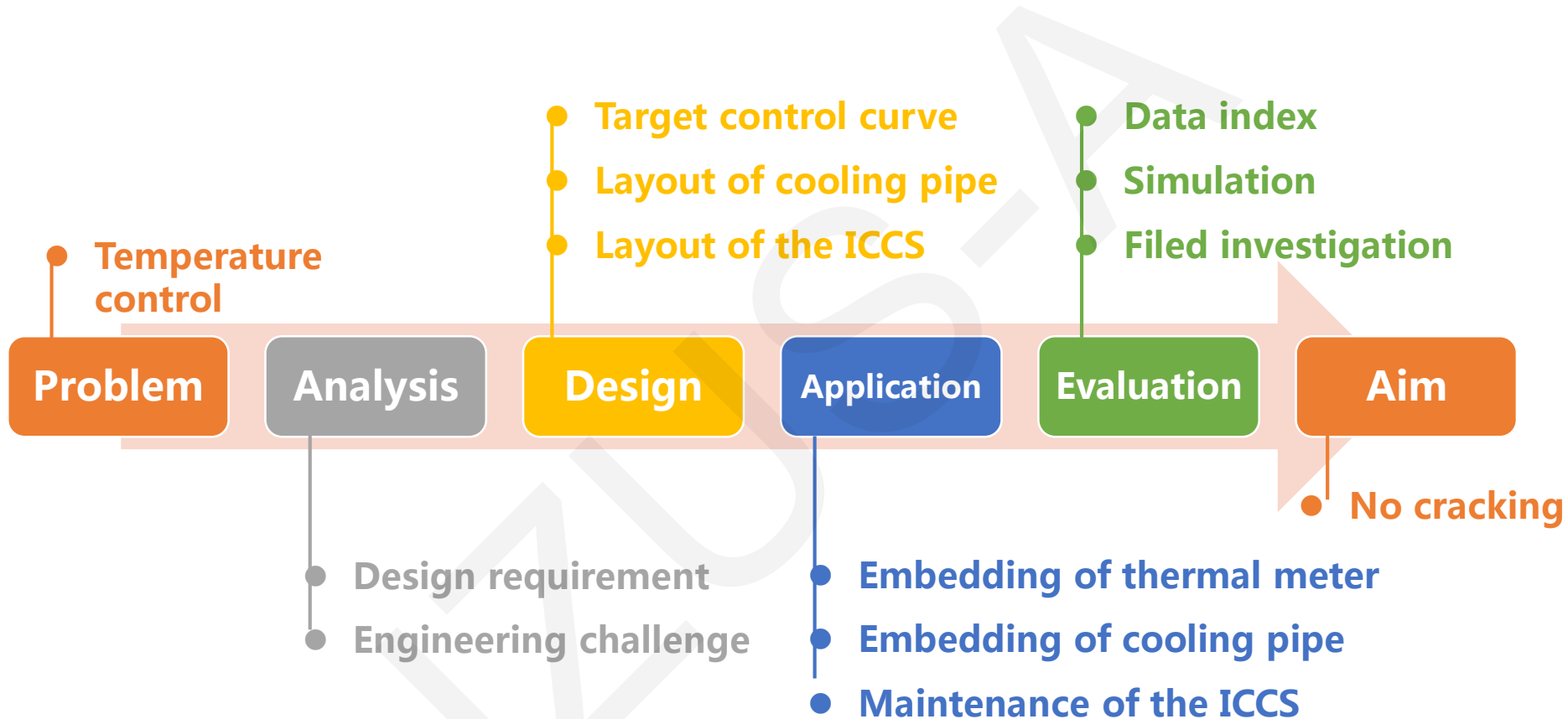


Intelligent control system



Fully apply intelligent temperature control technology (Wudongde)

Application process



Zeyu NING, Peng LIN, Jianshu OUYANG, et al. Intelligent cooling control for mass concrete relating to spiral case structure. *Advances in concrete construction*, 2022, 14(1):57-70. DOI:10.12989/acc.2022.14.1.057.

Hard work pays off



The dam without temperature cracks has finally been completed
(Xiluodu left; Baihetan right)

Qixiang FAN. 2017, "Technology improvements and management innovations in construction of Xiluodu hydropower station on Jinsha River", *Frontiers of Engineering Management.*, 4(2),231. DOI:10.15302/J-FEM-2017103