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An adaptive multiscale approach for identifying multiple flaws based on XFEM and a discrete artificial fish swarm algorithm

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Highlights

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- An adaptive multiscale approach is proposed for identifying multiple flaws.
- The DAFS algorithm and K-means are employed to determine probable subdomains.
- The ABC algorithm is adopted to capture the true flaws and remove the false flaws.
- This approach performs more efficiently than previously proposed approaches.