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obtained by using a risk-neutral pricing principle and quasi-conditional expectation. To better understand the pricing model, some Greeks of this pricing model are given. In addition, the influence of the Hurst parameter *H*, a measure of long memory in the financial market, on binary option pricing is analyzed. Finally, the study provides an example that study binary option by fuzzifying the maturity value of the stock price using the triangular fuzzy number. The numerical experiment demonstrates the fuzzy pricing model proposed is rational and practicable.



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