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## Documents

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### **Categorification of the Fibonacci numbers using representations of quivers**

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#### **Abstract**

In a previous paper we presented a partition formula for the even-index Fibonacci numbers using the preprojective representations of the 3-Kronecker quiver and its universal cover, the 3-regular tree. In this paper we deal in a similar way with the odd-index Fibonacci numbers. The Fibonacci modules introduced here provide a convenient categorification of the Fibonacci numbers.

#### **Author Keywords**

3- Kronecker quiver; 3-regular tree; Categorification; Fibonacci number; Quiver representation; Universal cover

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