

Lecture 16

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- ▶ Duality between circular convolution \circledast and element-by-element multiplication \diamond
- ▶ DFT synthesis equation and the infinite periodic extension of a vector
- ▶ Finite-length periodic extension: special cases

New Operations: \diamond and \otimes

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Element-by-element product $\mathbf{s} = \mathbf{x} \diamond \mathbf{y}$:

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Circular convolution matrix of vector \mathbf{a} :

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- ▶ More on this at the end of the semester.

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