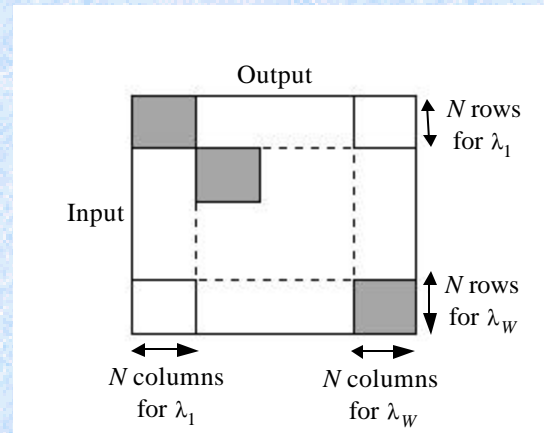




## Modeling of Optical Cross-Connects with Limited Wavelength Conversion

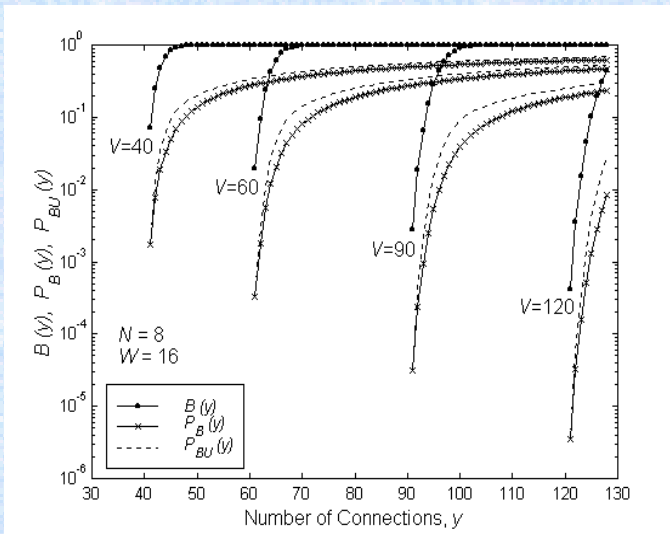
### Motivation

- Wavelength-interchanging cross-connect (WIXC) functionally equivalent to conventional switching matrix
- Limited wavelength-interchanging cross-connect (L-WIXC) differ from WIXC due to limitations in the wavelength conversion capability



### Proposal

- Array model for L-WIXC connection setup
- Analytical method for L-WIXC blocking performance



### Advantage

- Flexible – can represent various classes of L-WIXCs by changing the constraints of object placement
- A handy tool for quantitative evaluation of various L-WIXC architecture design

### Application

- Use to guide the design of L-WIXCs so as to conform to certain performance criteria

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