

$$\chi_{z^{-1}}^{-1} \left( \left( \left[ \begin{array}{c} z^+ \\ \bullet \\ \vdots \\ \bullet \\ z^- \end{array} \right] \right) \right) \equiv \left( \begin{array}{c} \bullet \\ \bullet \\ z^- \end{array} \right) + \left( \begin{array}{c} z^+ \\ \bullet \\ \vdots \\ \bullet \\ z^- \end{array} \right) + \frac{1}{2} \left( \begin{array}{c} z^+ \quad z^+ \\ \bullet \quad \bullet \\ \vdots \quad \vdots \\ \bullet \quad \bullet \\ z^- \quad z^- \end{array} \right) - \frac{1}{12} \left( \begin{array}{c} z^+ \quad \quad z^+ \\ \bullet \quad \quad \bullet \\ \vdots \quad \quad \vdots \\ \bullet \quad \quad \bullet \\ z^- \quad \quad z^- \end{array} \right) + (\text{deg} > 3).$$