Wiggler Field Calculations

– Predicted Field Integrals for Wiggler Nr 2 –
– Transfer Functions for Wiggler Nr 2 at 1.9 T –
– Present Fit Function Disallows Skew Quad Component –

1. **Predicted Field Integrals for Wiggler Nr 2**
   - Direct comparison with ST measurements now possible
   - Field integral/transfer function relationship obtained

     ⇒ Both field integrals and transfer functions obtained point to smaller skew quad component than measured in Wiggler Nr 1

2. **Transfer Functions for Wiggler Nr 2 at 1.9 T**
   - Modelled Wiggler Nr 2 with 115 A and 6.6 A in trim coils

     ⇒ Improvement in transfer functions at 1.9 T compared to 2.1 T obtained also with KWS measured coil displacements

     ⇒ Trim current slightly higher than 6.6 A will be needed at 1.9 T

3. **Present Fit Function Disallows Skew Quad Component**
   - Presently used field fit function for tracking assumed field symmetries

     ⇒ Need new fit function if skew quad field needed for tracking