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# 1 e-H V-Matrix

## 1.1 Implementation

## 1.2 Direct Matrix Elements

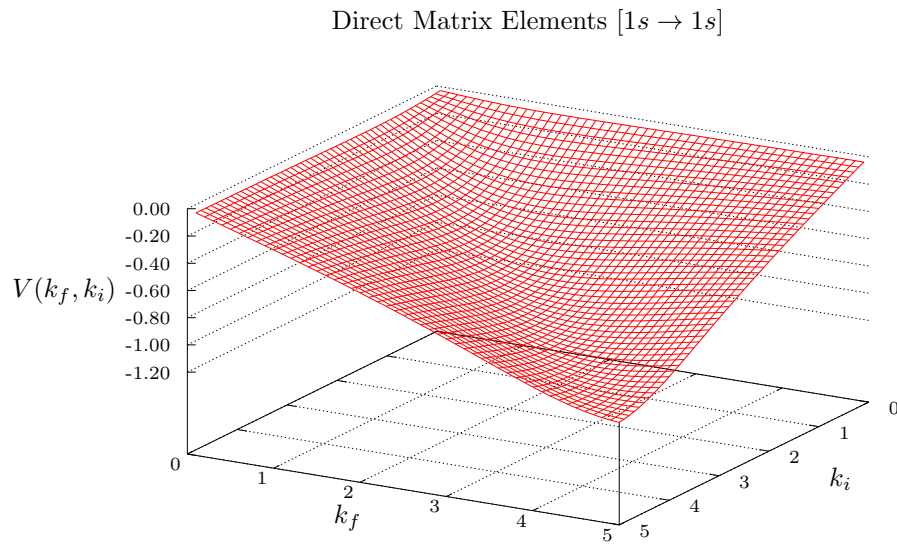
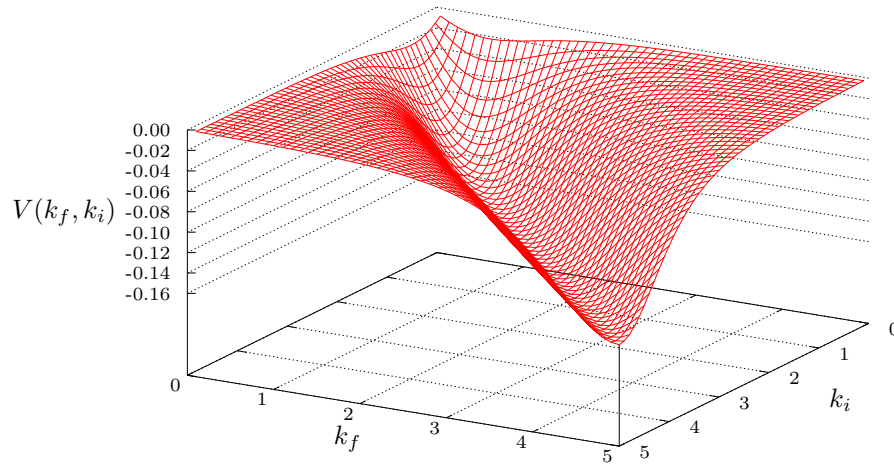
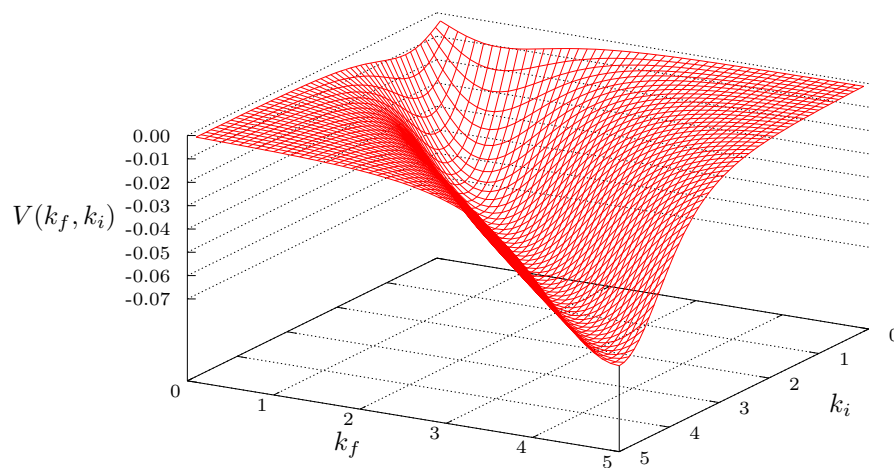


Figure 1: ...

Direct Matrix Elements  $[1s \rightarrow 2s]$ *Figure 2: ...*Direct Matrix Elements  $[1s \rightarrow 3s]$ *Figure 3: ...*

### 1.3 Exchange Matrix Elements

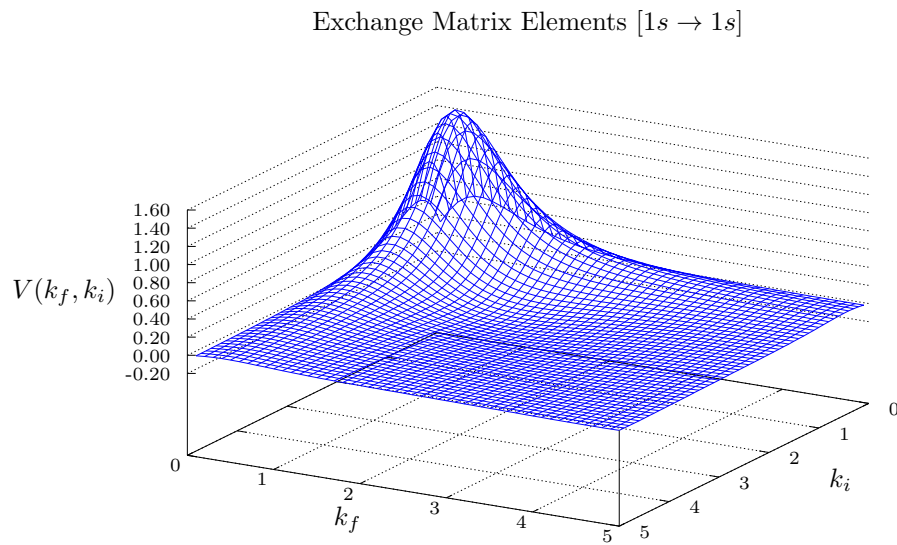


Figure 4: ...

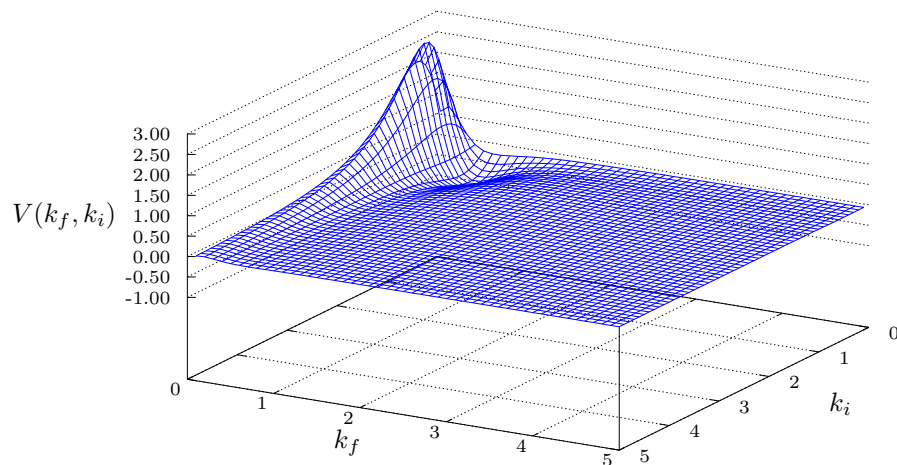
Exchange Matrix Elements  $[1s \rightarrow 2s]$ 


Figure 5: ...

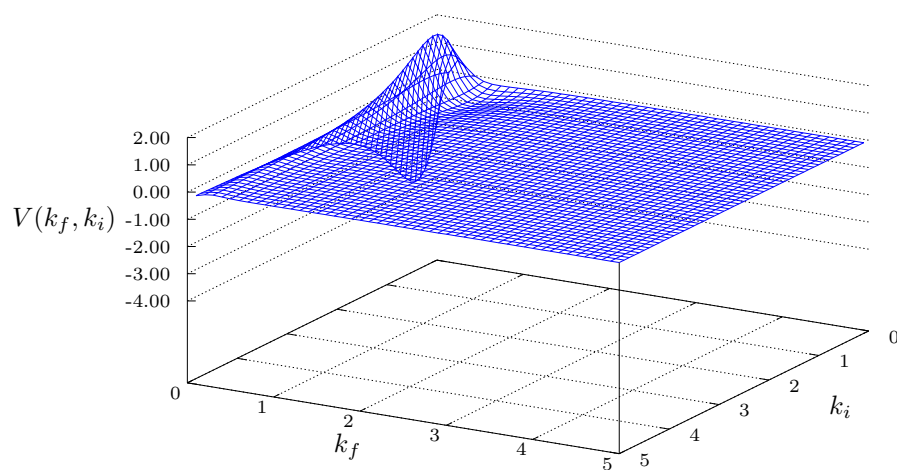
 Exchange Matrix Elements  $[1s \rightarrow 3s]$ 


Figure 6: ...

## 1.4 On-Shell Matrix Elements

## **2   $V_{12}$ Potential in S-Wave Model**

## **3   Reduced CCC Code**