## **Algorithm 1** mptm(IN: $c_1, c_2, c_3, c_4, c_5, c_6, c_0, f, omega, e; OUT: u)$

```
1: for k \in [1; n_3 - 2] do
      2:
                                            for i \in [1; n_1 - 2] do
                                                                 for j \in [1; n_2 - 2] do
      3:
      4:
                                                                                       m_0 \leftarrow k + n_3 \cdot j + n_2 \cdot n_3 \cdot i
                                                                                       if c_0[m_0] > 0 then
      5:
                                                                                                             m_2 \leftarrow m_0 - n_2 \cdot n_3; \ m_4 \leftarrow m_0 - n_3; \ m_6 \leftarrow m_0 - 1
      6:
                                                                                                             r[m_0] \leftarrow (omega \cdot (c_2[m_0] \cdot r[m_2] + c_4[m_0] \cdot r[m_4] + c_6[m_0] \cdot r[m_6]) + r[m_0]) / ((0.5 \cdot omega + 1) \cdot c_0[m_0])
      7:
      8: for k \in [n_3 - 2; 1] do
                                            for i \in [n_1 - 2; 1] do
      9:
                                                                 for j \in [n_2 - 2; 1] do
10:
                                                                                       m_0 \leftarrow k + n_3 \cdot j + n_2 \cdot n_3 \cdot i
11:
                                                                                       if c_0[m_0] > 0 then
12:
13:
                                                                                                             m_1 \leftarrow m_0 + n_2 \cdot n_3; \ m_3 \leftarrow m_0 + n_3; \ m_5 \leftarrow m_0 + 1
                                                                                                             r[m_0] \leftarrow (omega \cdot (c_1[m_0] \cdot r[m_1] + c_3[m_0] \cdot r[m_3] + c_5[m_0] \cdot r[m_5]) + r[m_0] \cdot c_0[m_0]) / ((0.5 \cdot omega + c_5[m_0] \cdot r[m_0] \cdot r[m_0]) + c_5[m_0] \cdot r[m_0]) + c_5[m_0] \cdot r[m_0] \cdot r[
14:
                                                                                                              1) \cdot c_0[m_0])
```