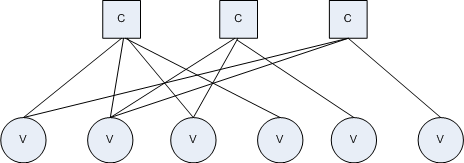


LLR

msg

msg

new LLR



msg

msg

1. Initialization: For

|  |  |
| --- | --- |
|  | ① |
|  | ② |
|  |  |

1. Update CN: do

|  |  |
| --- | --- |
|  | ③ |
|  |  |

where

1. Update VN:

|  |  |
| --- | --- |
|  | ④ |
|  |  |

1. Update a posteriori LLR:

|  |  |
| --- | --- |
|  | ⑤ |
|  |  |

1. Repeat from (2) to (4) until the maximum number of iteration is reached, the estimated codeword is then given by:

|  |  |
| --- | --- |
|  | ⑥ |

1. Initialization: For

|  |  |
| --- | --- |
|  | ⑦ |
|  | ⑧ |
|  | ⑨ |
|  |  |

1. do

|  |  |
| --- | --- |
|  | ⑩ |
|  |  |

and

|  |  |
| --- | --- |
|  | ⑪ |
|  |  |

where

1. Repeat (2) until the maximum number of iteration is reached, the estimated codeword is then given by ⑥

|  |  |
| --- | --- |
| Algorithm |  |
| SP |  |
| MS |  |
| OMS |  |
| NMS |  |