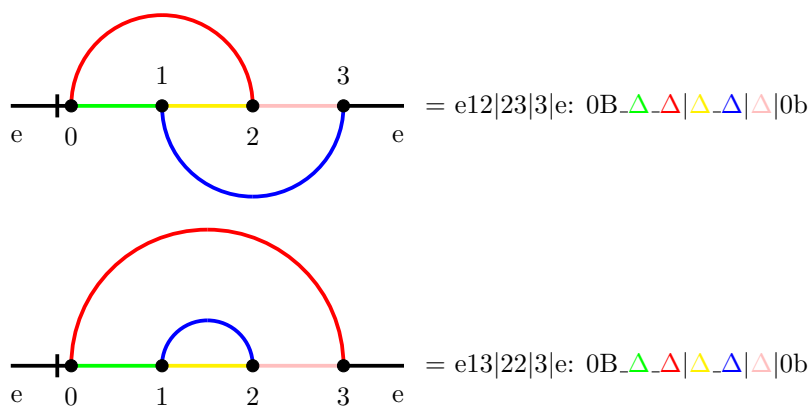


Two-loop MHD  $\Sigma^{b'b}$  diagrams

$$\begin{array}{lll}
\text{---} = \Delta^{vv} = v v & \text{---} \vdash = \Delta^{vv'} = v V & \vdash \text{---} = \Delta^{v'v} = V v \\
\text{---} = \Delta^{bb} = b b & \vdash \text{---} = \Delta^{b'b} = B b & \text{---} \vdash = \Delta^{bb'} = b B \\
\text{---} = \Delta^{vb} = v b & \text{---} \text{---} = \Delta^{bv} = b v & \vdash \text{---} = \Delta^{v'b} = V b \\
\text{---} \text{---} \vdash = \Delta^{bv'} = b V & \text{---} \vdash = \Delta^{vb'} = v B & \vdash \text{---} = \Delta^{b'v} = B v
\end{array}$$



Hereinafter, we use the following notation:  $vv = vv\bar{v}v$ ,  $vV = vv\bar{v}V$ ,  $Vv = Vvv\bar{v}$ ,  $bb = bbbb$ ,  $Bb = Bbbb$ ,  $bB = bbbB$ ,  $vb = vvbb$ ,  $bv = bbv\bar{v}$ ,  $Vb = Vvbb$ ,  $bV = bbvV$ ,  $vB = vvbB$ ,  $Bv = Bbv\bar{v}$ .

1 Diagrams of topological type e12|23|3|e

There are 256 such diagrams in total. The symmetry factor of each diagram is equal to 1.

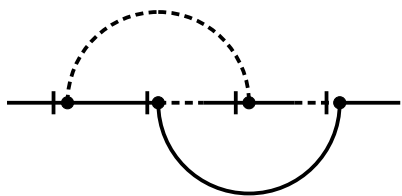


Figure 1:  
0B\_bB\_vvvv|vB\_bbbb|bV|0b

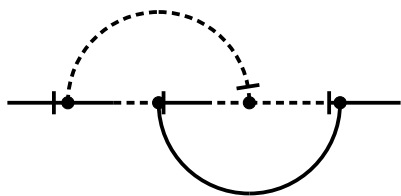


Figure 3:  
0B\_bv\_vvvV|Bv\_bbbb|vV|0b

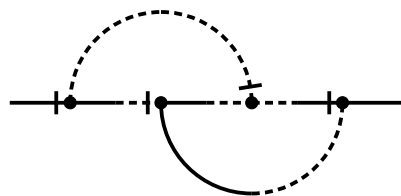


Figure 5:  
 $0B\_bV\_vvvV|bv\_bbvv|vB|0b$

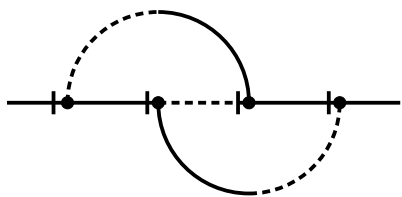


Figure 2:  
0B\_bB\_vvbb|vV\_bbvv|bB|0b

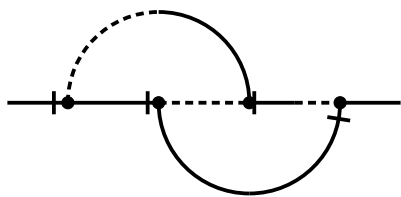


Figure 4:  
0B\_bB\_vvbb|vv\_bbbB|Bv|0b

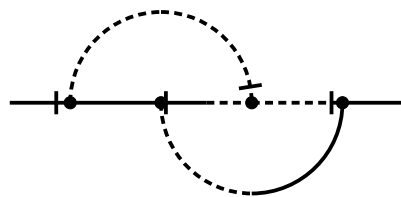


Figure 6:  
0B\_bb\_vvvV|Bv\_vvbb|vV|0b

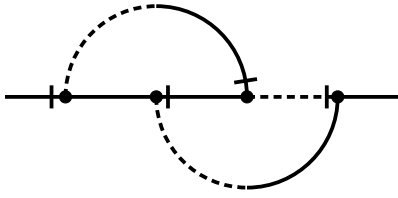


Figure 7:  
0B\_bb\_vvbB|Bb\_vvbb|vV|0b

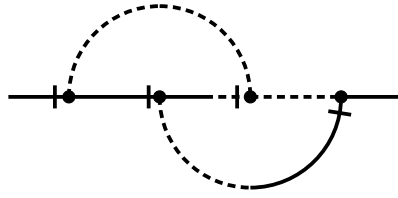


Figure 13:  
0B\_bB\_vvvv|bV\_vvbB|vv|0b

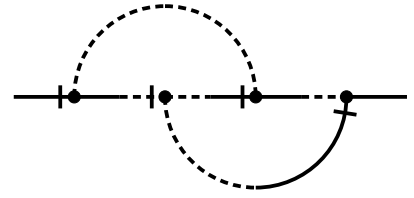


Figure 19:  
0B\_bV\_vvvv|vB\_vvbB|bv|0b

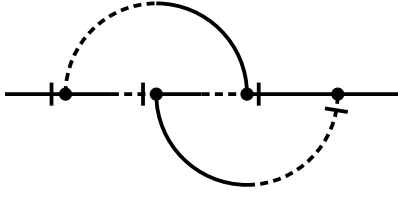


Figure 8:  
0B\_bV\_vvbb|bv\_bbvV|Bb|0b

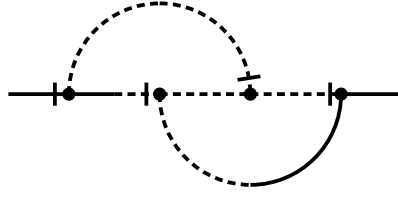


Figure 14:  
0B\_bV\_vvvV|vv\_vvbb|vV|0b

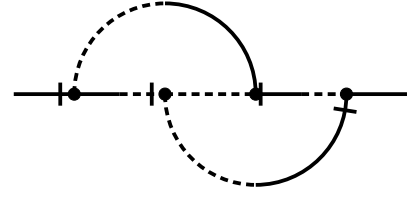


Figure 20:  
0B\_bV\_vvbb|vv\_vvbB|Bv|0b

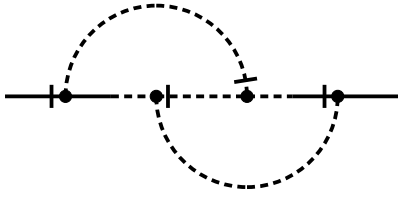


Figure 9:  
0B\_bv\_vvvV|Vv\_vvvv|vB|0b

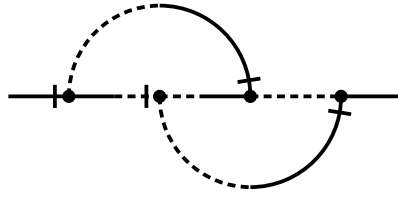


Figure 15:  
0B\_bV\_vvbB|vb\_vvbB|vv|0b

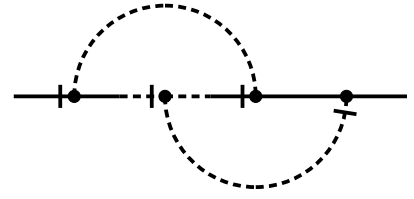


Figure 21:  
0B\_bV\_vvvv|vB\_vvvV|bb|0b

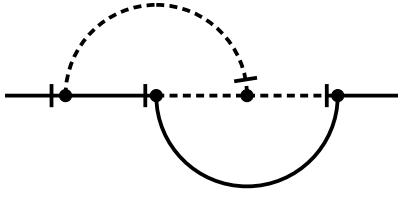


Figure 10:  
0B\_bB\_vvvV|vv\_bbbb|vV|0b

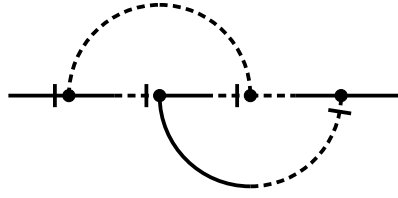


Figure 16:  
0B\_bV\_vvvv|bV\_bbvV|vb|0b

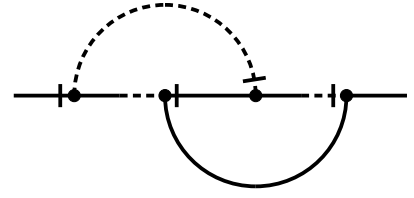


Figure 22:  
0B\_bv\_vvvV|Bb\_bbbb|bV|0b

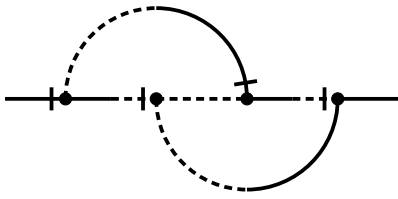


Figure 11:  
0B\_bV\_vvbB|vv\_vvbb|bV|0b

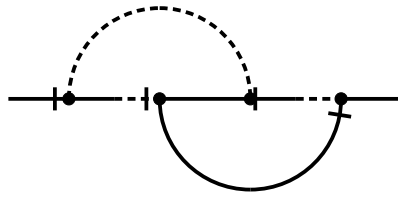


Figure 17:  
0B\_bV\_vvvv|bb\_bbbB|Bv|0b

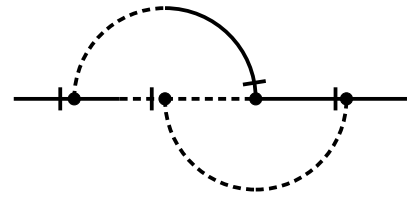


Figure 23:  
0B\_bV\_vvbB|vv\_vvvv|bB|0b

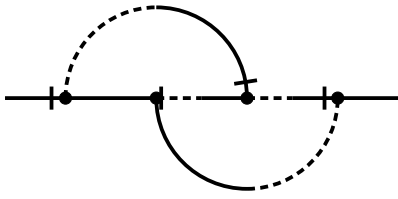


Figure 12:  
0B\_bb\_vvbB|Vb\_bbvV|vB|0b

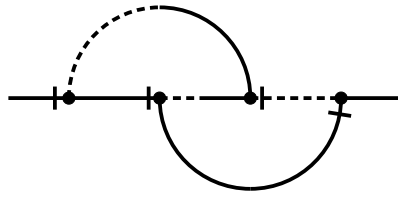


Figure 18:  
0B\_bB\_vvbb|vb\_bbbB|Vv|0b

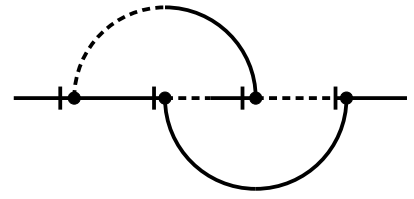


Figure 24:  
0B\_bB\_vvbb|vB\_bbbb|vV|0b

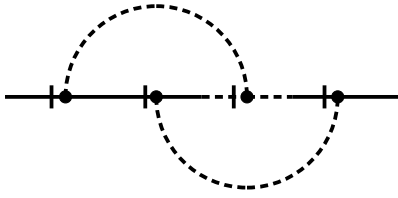


Figure 25:  
0B\_bB\_vvvv|bV\_vvvv|vB|0b

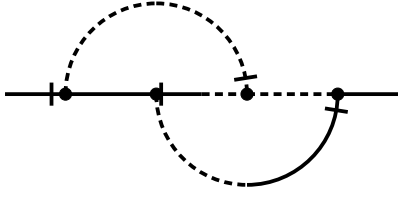


Figure 26:  
0B\_bb\_vvvV|Bv\_vvbB|vv|0b

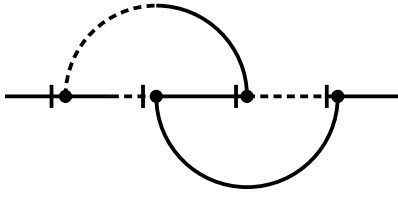


Figure 27:  
0B\_bV\_vvbb|bB\_bbbb|vV|0b

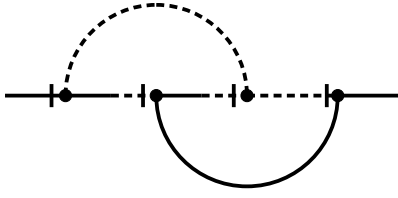


Figure 28:  
0B\_bV\_vvvv|bV\_bbbb|vV|0b

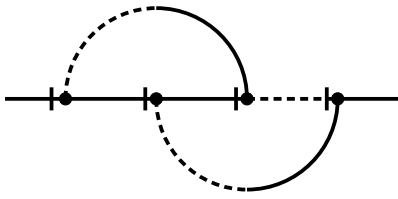


Figure 29:  
0B\_bB\_vvbb|bB\_vvbb|vV|0b

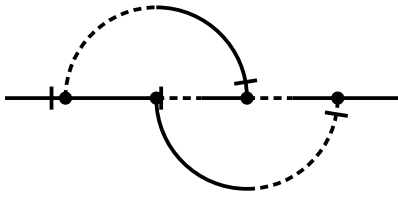


Figure 30:  
0B\_bb\_vvbB|Vb\_bbvV|vb|0b

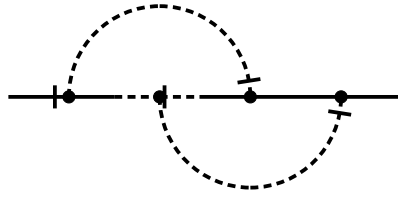


Figure 31:  
0B\_bv\_vvvV|Vb\_vvvV|bb|0b

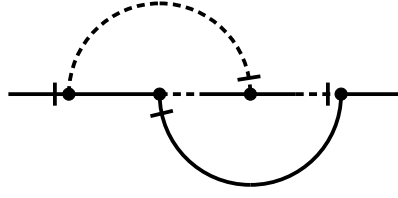


Figure 32:  
0B\_bb\_vvvV|vb\_Bbbb|bV|0b

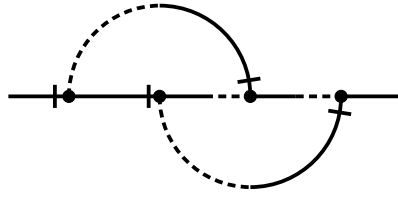


Figure 33:  
0B\_bB\_vvbB|bv\_vvbB|bv|0b

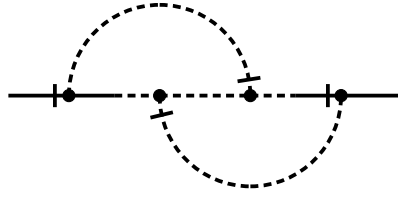


Figure 34:  
0B\_bv\_vvvV|vv\_Vvvv|vB|0b

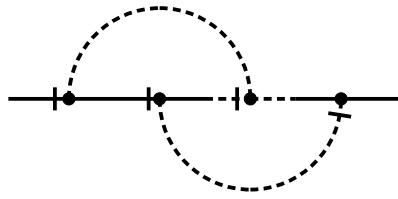


Figure 35:  
0B\_bB\_vvvv|bV\_vvvV|vb|0b

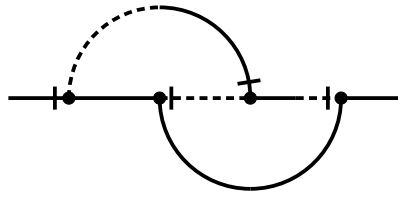


Figure 36:  
0B\_bb\_vvbB|Vv\_bbbb|bV|0b

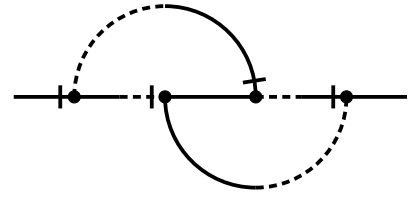


Figure 37:  
0B\_bV\_vvbB|bb\_bbvV|vB|0b

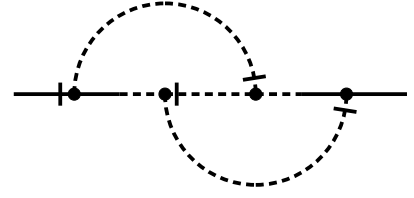


Figure 38:  
0B\_bv\_vvvV|Vv\_vvvV|vb|0b

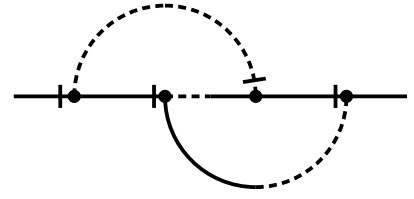


Figure 39:  
0B\_bB\_vvvV|vb\_bbvV|bB|0b

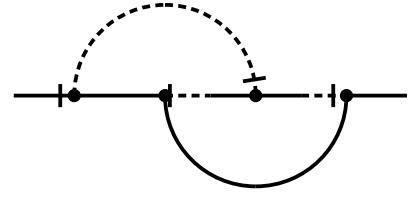


Figure 40:  
0B\_bb\_vvvV|Vb\_bbbb|bV|0b

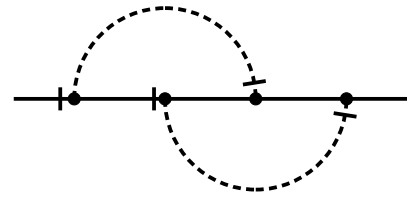


Figure 41:  
0B\_bB\_vvvV|bb\_vvvV|bb|0b

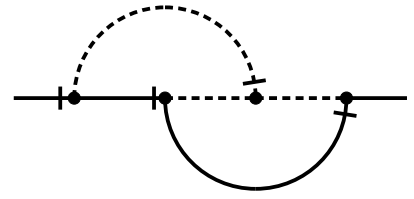


Figure 42:  
0B\_bB\_vvvV|vv\_bbbB|vv|0b

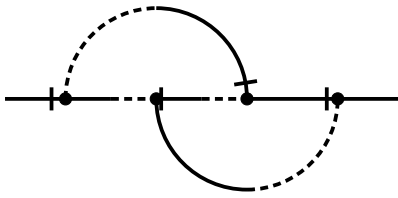


Figure 43:  
0B\_bv\_vvbB|Bv\_bbvV|bB|0b

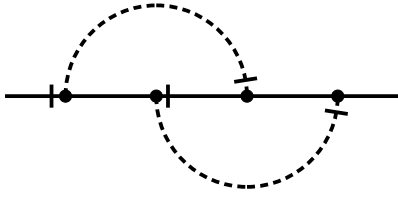


Figure 44:  
0B\_bb\_vvvV|Bb\_vvvV|bb|0b

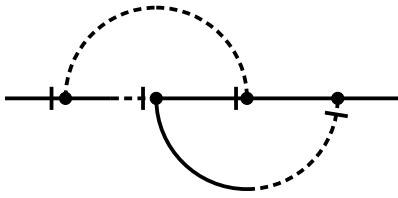


Figure 45:  
0B\_bV\_vvvv|bB\_bbvV|bb|0b

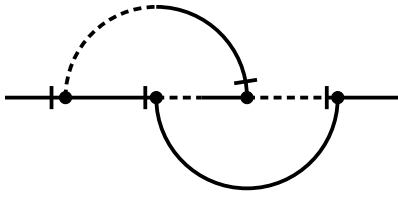


Figure 46:  
0B\_bB\_vvbB|vb\_bbbb|vV|0b

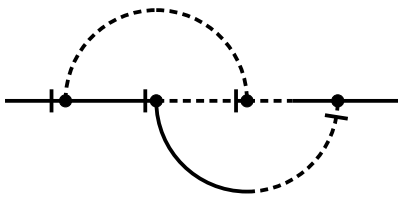


Figure 47:  
0B\_bB\_vvvv|vV\_bbvV|vb|0b

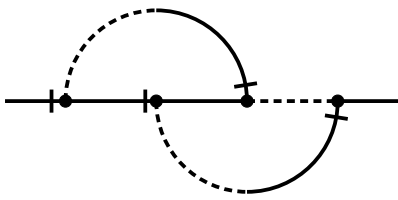


Figure 48:  
0B\_bB\_vvbB|bb\_vvbB|vv|0b

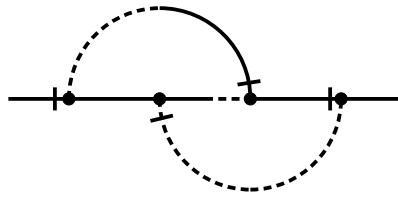


Figure 49:  
0B\_bb\_vvbB|bv\_Vvvv|bB|0b

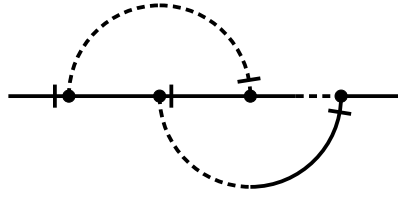


Figure 50:  
0B\_bb\_vvvV|Bb\_vvbB|bv|0b

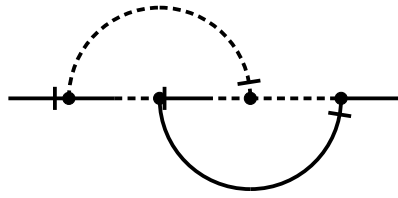


Figure 51:  
0B\_bv\_vvvV|Bv\_bbbB|vv|0b

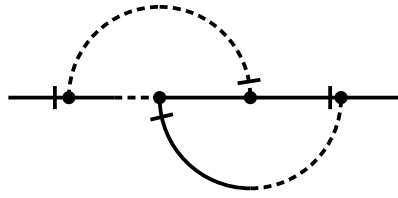


Figure 52:  
0B\_bv\_vvvV|bb\_BbvV|bB|0b

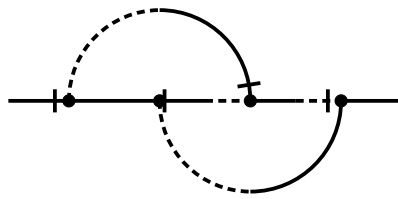


Figure 53:  
0B\_bb\_vvbB|Bv\_vvbB|bV|0b

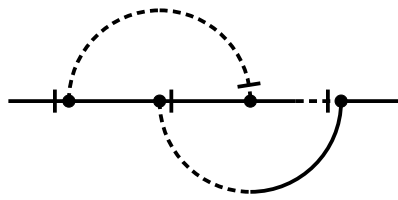


Figure 54:  
0B\_bb\_vvvV|Bb\_vvbB|bV|0b

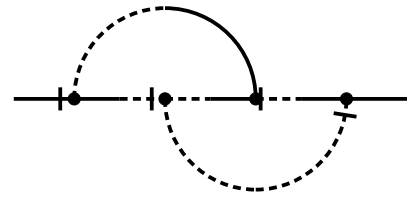


Figure 55:  
0B\_bV\_vvbB|vb\_vvvV|Vb|0b

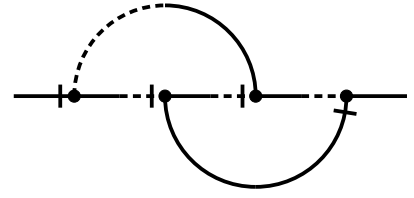


Figure 56:  
0B\_bV\_vvbB|bV\_bbbB|bv|0b

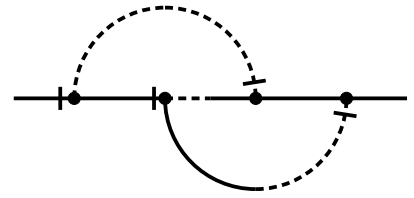


Figure 57:  
0B\_bB\_vvvV|vb\_bbvV|bb|0b

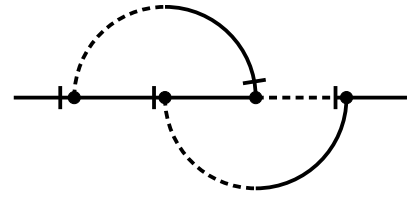


Figure 58:  
0B\_bB\_vvbB|bb\_vvbB|vV|0b

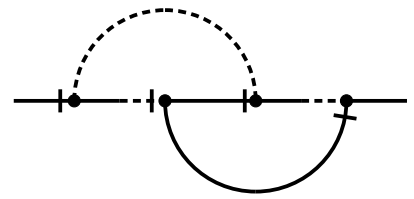


Figure 59:  
0B\_bV\_vvvv|bB\_bbbB|bv|0b

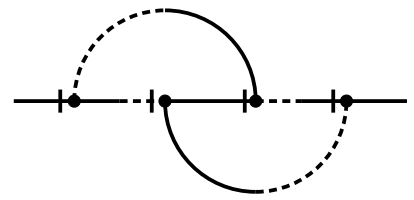


Figure 60:  
0B\_bV\_vvbB|bB\_bbvV|vB|0b

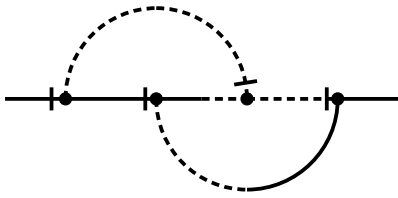


Figure 61:  
0B\_bB\_vvvV|bv\_vvbb|vV|0b

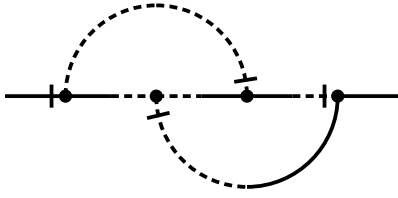


Figure 62:  
0B\_bv\_vvvV|vb\_Vvbb|bV|0b

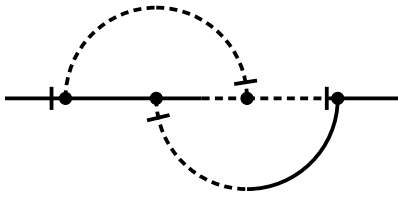


Figure 63:  
0B\_bb\_vvvV|bv\_Vvbb|vV|0b

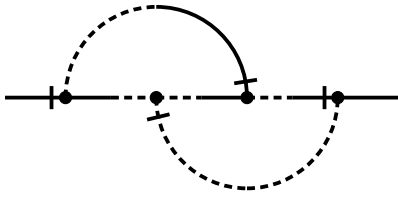


Figure 64:  
0B\_bv\_vvbB|vb\_Vvvv|vB|0b

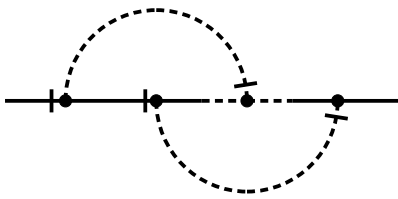


Figure 65:  
0B\_bB\_vvvV|bv\_vvvV|vb|0b

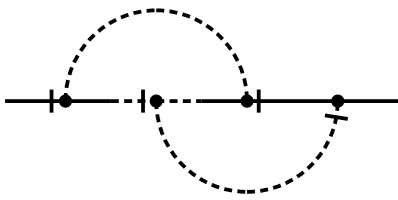


Figure 66:  
0B\_bV\_vvvv|vb\_vvvV|Bb|0b

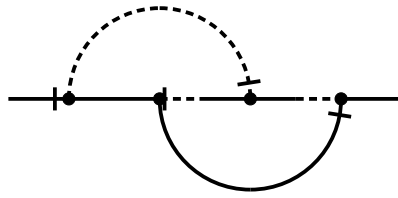


Figure 67:  
0B\_bb\_vvvV|Vb\_bbbB|bv|0b

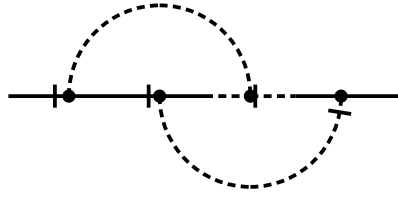


Figure 68:  
0B\_bB\_vvvv|bv\_vvvV|Vb|0b

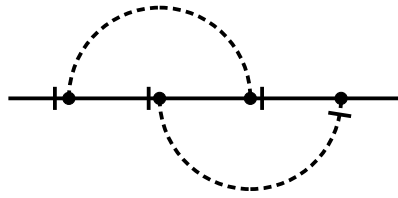


Figure 69:  
0B\_bB\_vvvv|bb\_vvvV|Bb|0b

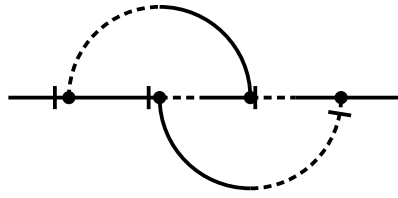


Figure 70:  
0B\_bB\_vvbb|vb\_bbvV|Vb|0b

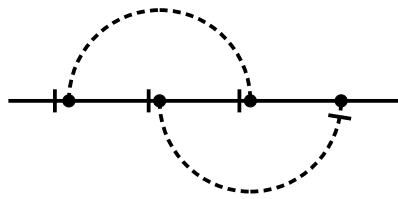


Figure 71:  
0B\_bB\_vvvv|bB\_vvvV|bb|0b

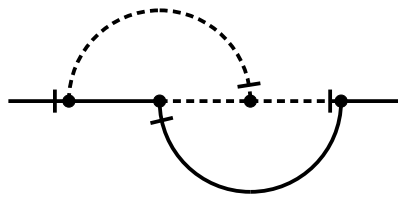


Figure 72:  
0B\_bb\_vvvV|vv\_Bbbb|vV|0b

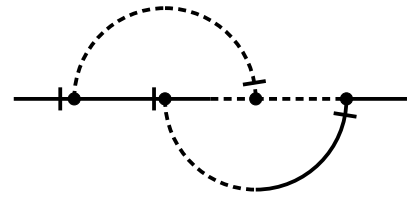


Figure 73:  
0B\_bB\_vvvV|bv\_vvbB|vv|0b

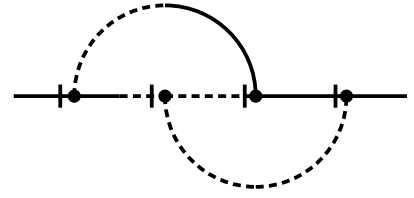


Figure 74:  
0B\_bV\_vvbb|vV\_vvvv|bB|0b

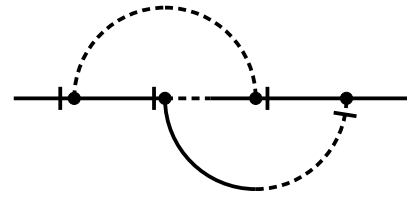


Figure 75:  
0B\_bB\_vvvv|vb\_bbvV|Bb|0b

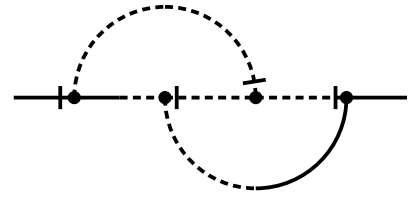


Figure 76:  
0B\_bv\_vvvV|Vv\_vvbb|vV|0b

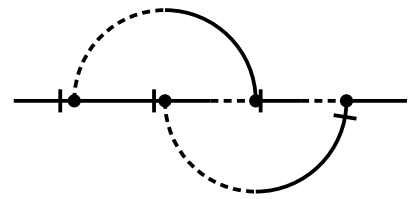


Figure 77:  
0B\_bB\_vvbb|bv\_vvbB|Bv|0b

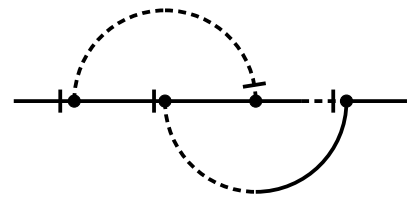


Figure 78:  
0B\_bB\_vvvV|bb\_vvbb|bV|0b

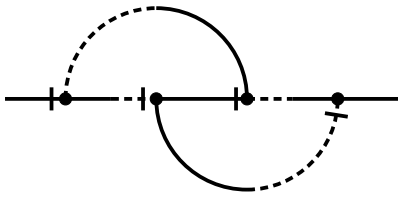


Figure 79:  
0B\_bV\_vvbb|bB\_bbvV|vb|0b

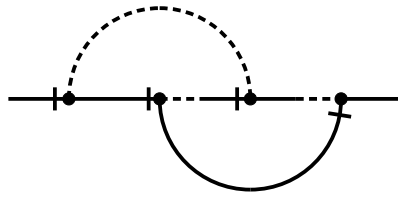


Figure 85:  
0B\_bB\_vvvv|vB\_bbbB|bv|0b

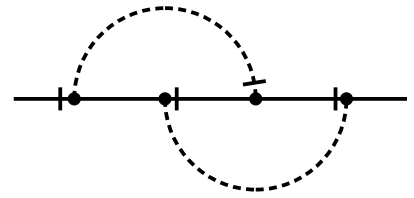


Figure 91:  
0B\_bb\_vvvV|Bb\_vvvv|bB|0b

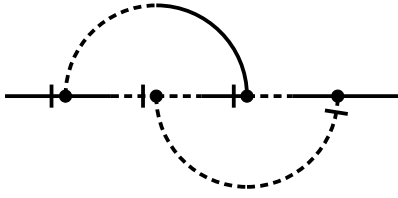


Figure 80:  
0B\_bV\_vvbb|vB\_vvvV|vb|0b

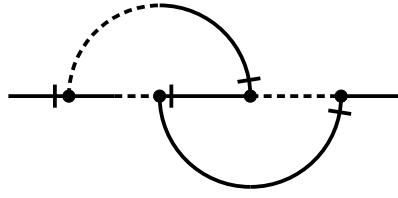


Figure 86:  
0B\_bv\_vvbB|Bb\_bbbB|vv|0b

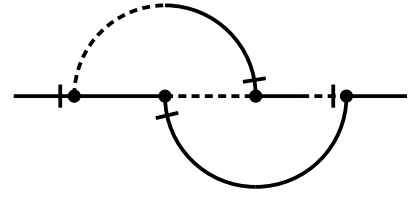


Figure 92:  
0B\_bb\_vvbB|vv\_Bbbb|bV|0b

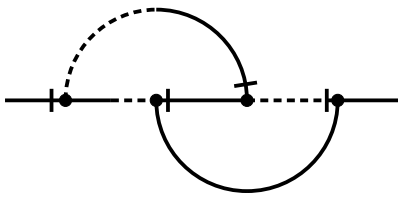


Figure 81:  
0B\_bv\_vvbB|Bb\_bbbb|vV|0b

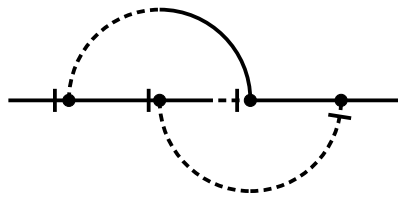


Figure 87:  
0B\_bB\_vvbb|bV\_vvvV|bb|0b

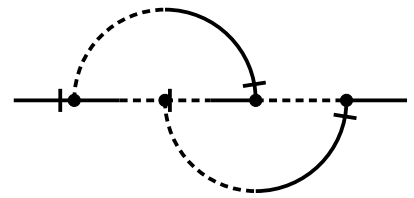


Figure 93:  
0B\_bv\_vvbB|Vb\_vvbB|vv|0b

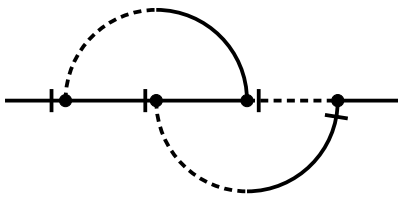


Figure 82:  
0B\_bB\_vvbb|bb\_vvbB|Vv|0b

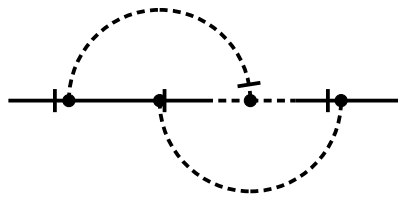


Figure 88:  
0B\_bb\_vvvV|Bv\_vvvv|vB|0b

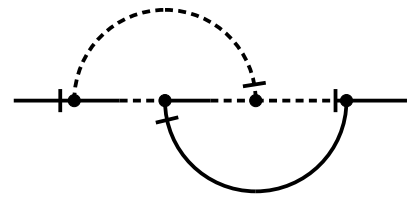


Figure 94:  
0B\_bv\_vvvV|bv\_Bbbb|vV|0b

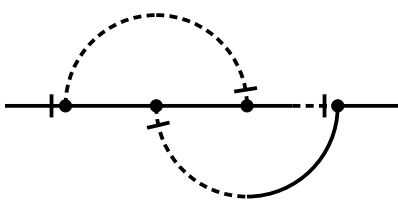


Figure 83:  
0B\_bb\_vvvV|bb\_Vvbb|bV|0b

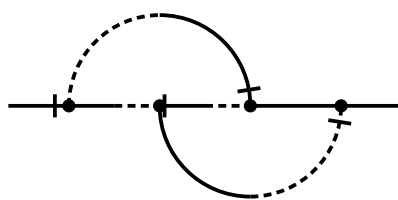


Figure 89:  
0B\_bv\_vvbB|Bv\_bbvV|bb|0b

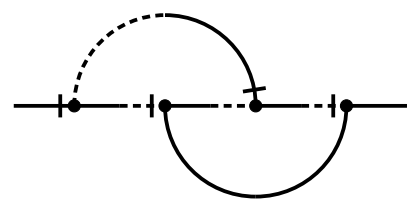


Figure 95:  
0B\_bV\_vvbB|bv\_bbbb|bV|0b

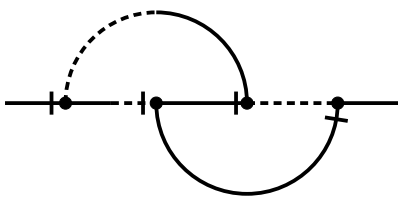


Figure 84:  
0B\_bV\_vvbb|bB\_bbbB|vv|0b

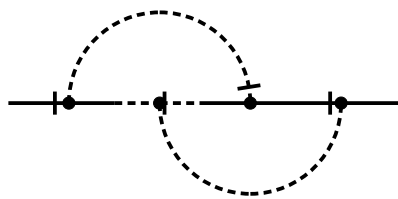


Figure 90:  
0B\_bv\_vvvV|Vb\_vvvv|bB|0b

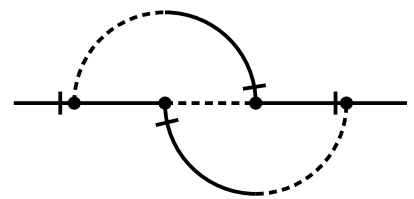


Figure 96:  
0B\_bb\_vvbB|vv\_Bbv|bB|0b

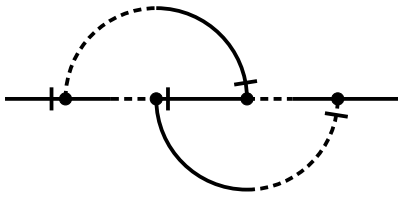


Figure 97:  
0B\_bv\_vvbB|Bb\_bbvV|vb|0b

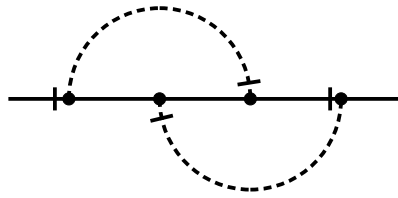


Figure 103:  
0B\_bb\_vvvV|bb\_Vvvv|bB|0b

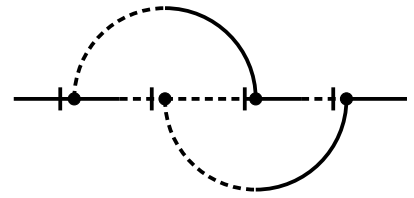


Figure 109:  
0B\_bV\_vvbb|vV\_vvbb|bV|0b

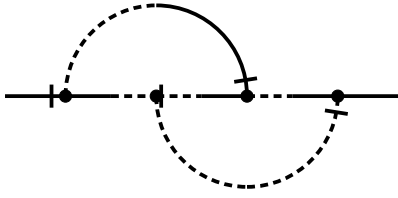


Figure 98:  
0B\_bv\_vvbB|Vb\_vvvV|vb|0b

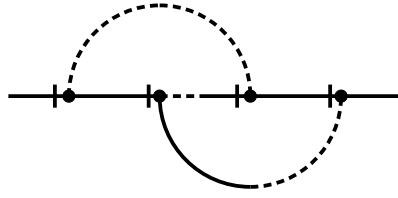


Figure 104:  
0B\_bB\_vvvv|vB\_bbvV|bB|0b

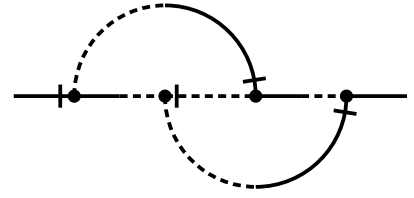


Figure 110:  
0B\_bv\_vvbB|Vv\_vvbB|bv|0b

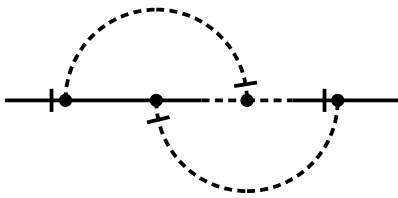


Figure 99:  
0B\_bb\_vvvV|bv\_Vvvv|vB|0b

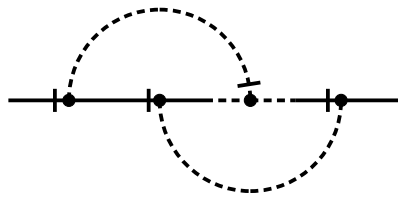


Figure 105:  
0B\_bB\_vvvV|bv\_vvvv|vB|0b

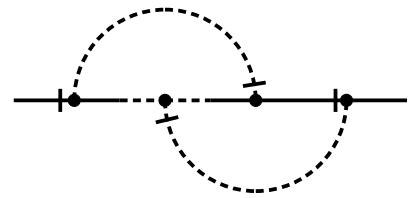


Figure 111:  
0B\_bv\_vvvV|vb\_Vvvv|bB|0b

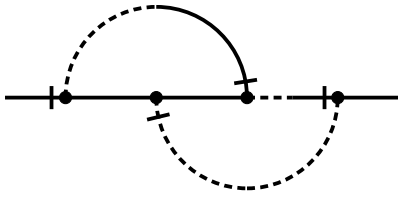


Figure 100:  
0B\_bb\_vvbB|bb\_Vvvv|vB|0b

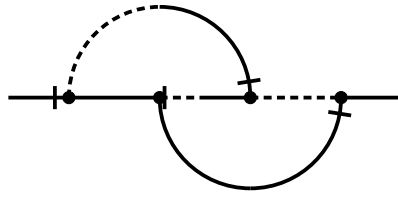


Figure 106:  
0B\_bb\_vvbB|Vb\_bbbB|vv|0b

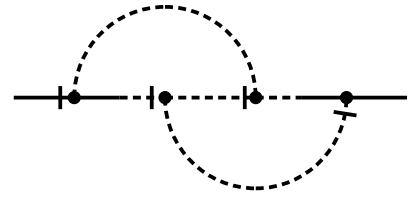


Figure 112:  
0B\_bV\_vvvv|vV\_vvvV|vb|0b

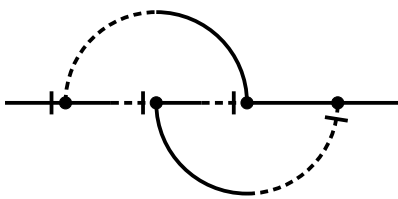


Figure 101:  
0B\_bV\_vvbb|bV\_bbvV|bb|0b

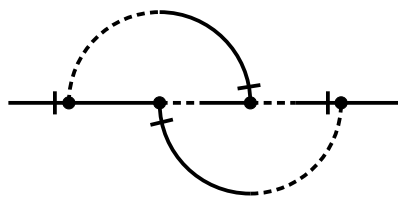


Figure 107:  
0B\_bb\_vvbB|vb\_BbvV|vB|0b

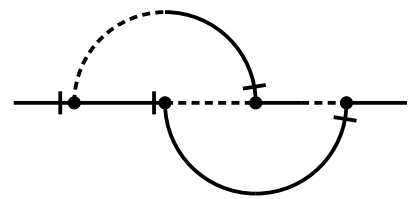


Figure 113:  
0B\_bB\_vvbB|vv\_bbbB|bv|0b

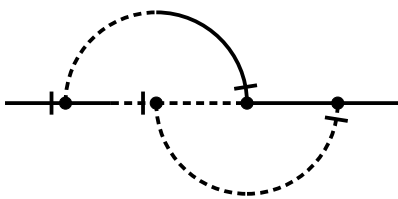


Figure 102:  
0B\_bV\_vvbB|vv\_vvvV|bb|0b

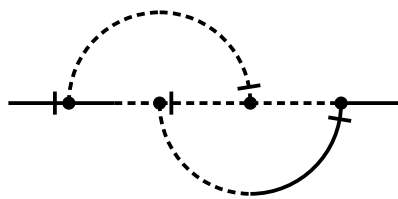


Figure 108:  
0B\_bv\_vvvV|Vv\_vvbB|vv|0b

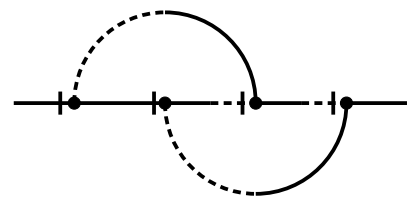


Figure 114:  
0B\_bB\_vvbb|bV\_vvbb|bV|0b

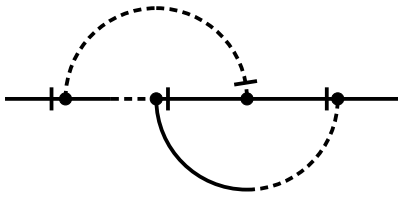


Figure 115:  
0B\_bv\_vvvV|Bb\_bbvV|bB|0b

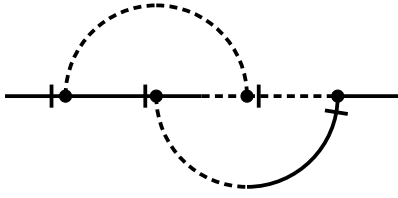


Figure 116:  
0B\_bB\_vvvv|bv\_vvbB|Vv|0b

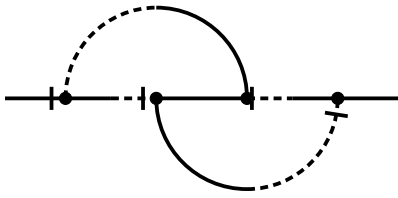


Figure 117:  
0B\_bV\_vvbb|bb\_bbvV|Vb|0b

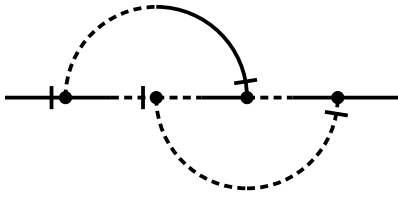


Figure 118:  
0B\_bV\_vvbB|vb\_vvvV|vb|0b

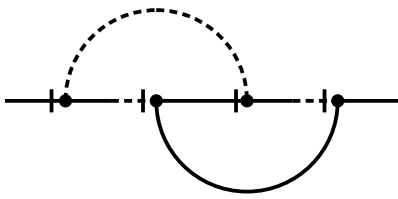


Figure 119:  
0B\_bV\_vvvv|bB\_bbbb|bV|0b

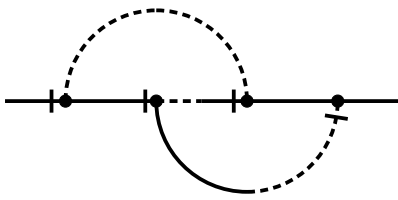


Figure 120:  
0B\_bB\_vvvv|vB\_bbvV|bb|0b

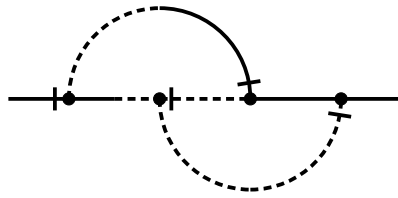


Figure 121:  
0B\_bv\_vvbB|Vv\_vvvV|bb|0b

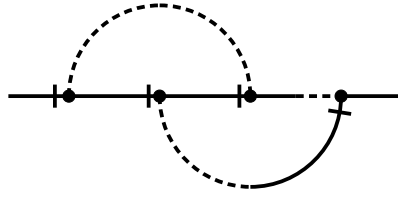


Figure 122:  
0B\_bB\_vvvv|bB\_vvbB|bv|0b

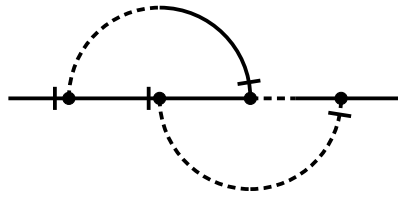


Figure 123:  
0B\_bB\_vvbB|bb\_vvvV|vb|0b

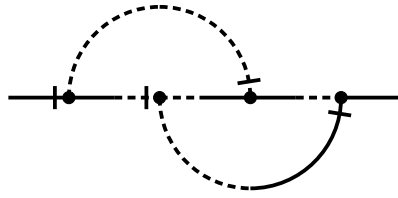


Figure 124:  
0B\_bV\_vvvV|vb\_vvbB|bv|0b

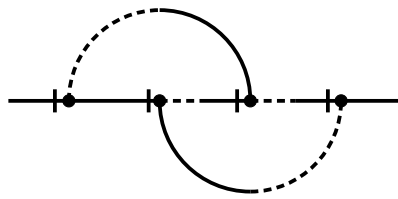


Figure 125:  
0B\_bB\_vvbb|vB\_bbvV|vB|0b

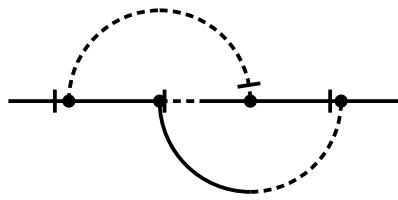


Figure 126:  
0B\_bb\_vvvV|Vb\_bbvV|bB|0b

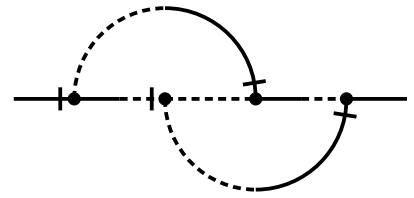


Figure 127:  
0B\_bV\_vvbB|vv\_vvbB|bv|0b

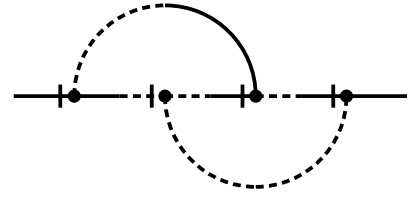


Figure 128:  
0B\_bV\_vvbb|vB\_vvvv|vB|0b

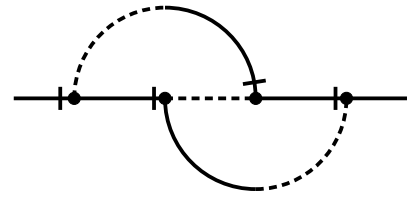


Figure 129:  
0B\_bB\_vvbB|vv\_bbvV|bB|0b

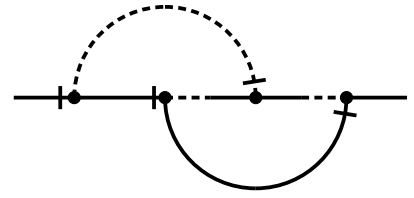


Figure 130:  
0B\_bB\_vvvV|vb\_bbbB|bv|0b

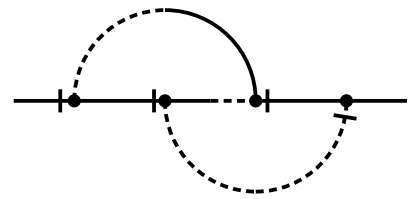


Figure 131:  
0B\_bB\_vvbb|bv\_vvvV|Bb|0b

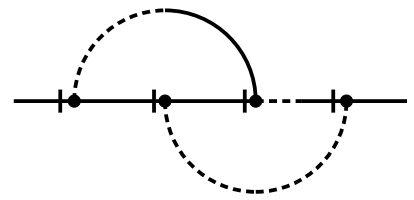


Figure 132:  
0B\_bB\_vvbb|bB\_vvvv|vB|0b



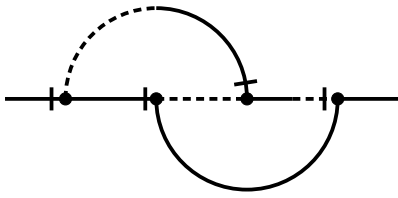


Figure 133:  
0B\_bB\_vvbB|vv\_bbbb|bV|0b

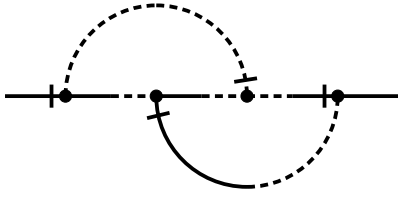


Figure 134:  
0B\_bv\_vvvV|bv\_Bbv|vB|0b

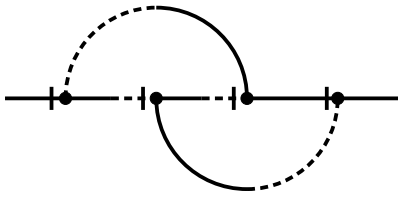


Figure 135:  
0B\_bV\_vvbB|bV\_bbvv|bB|0b

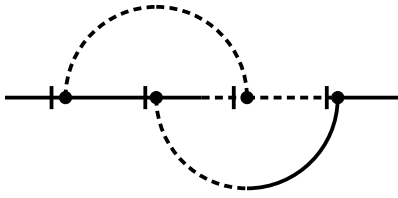


Figure 136:  
0B\_bB\_vvvv|bV\_vvbB|vV|0b

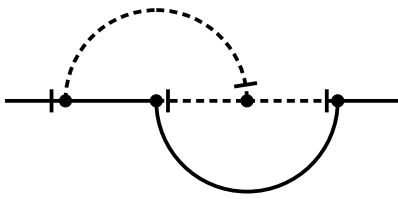


Figure 137:  
0B\_bb\_vvvV|Vv\_bbbb|vV|0b

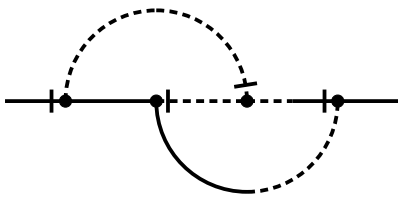


Figure 138:  
0B\_bb\_vvvV|Vv\_bbvv|vB|0b

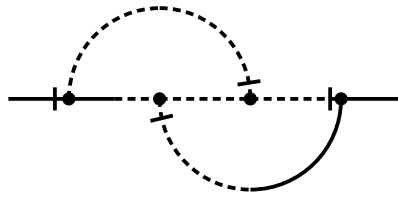


Figure 139:  
0B\_bv\_vvvV|vv\_VvbB|vV|0b

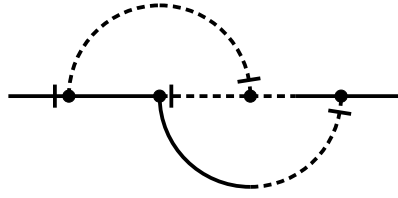


Figure 140:  
0B\_bb\_vvvV|Vv\_bbvV|vb|0b

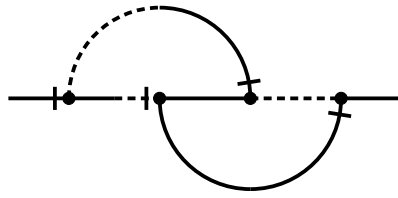


Figure 141:  
0B\_bV\_vvbB|bb\_bbbB|vv|0b

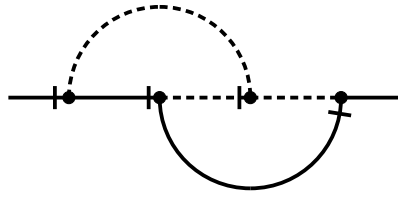


Figure 142:  
0B\_bB\_vvvv|vV\_bbbB|vv|0b

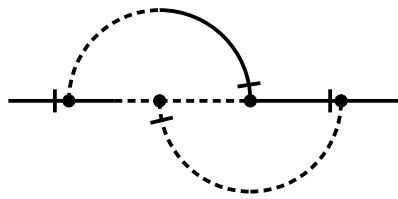


Figure 143:  
0B\_bv\_vvbB|vv\_Vvvv|bB|0b

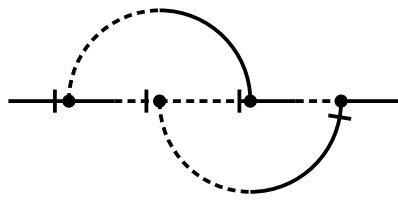


Figure 144:  
0B\_bV\_vvbB|vV\_vvbB|bv|0b

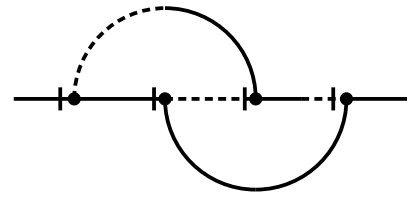


Figure 145:  
0B\_bB\_vvbB|vV\_bbbb|bV|0b

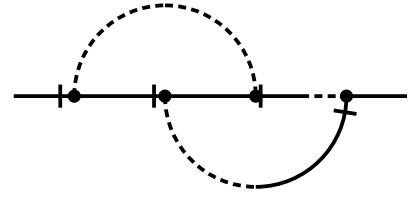


Figure 146:  
0B\_bB\_vvvv|bb\_vvbB|Bv|0b

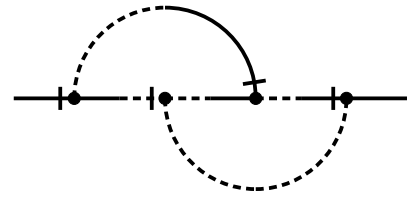


Figure 147:  
0B\_bV\_vvbB|vb\_vvvv|vB|0b

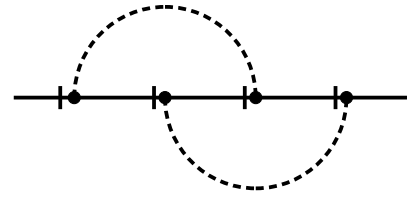


Figure 148:  
0B\_bB\_vvvv|bB\_vvvv|bB|0b

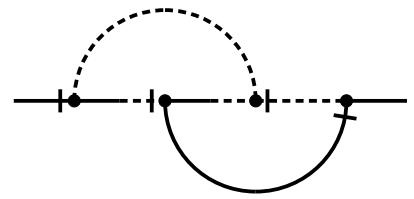


Figure 149:  
0B\_bV\_vvvv|bv\_bbbB|Vv|0b

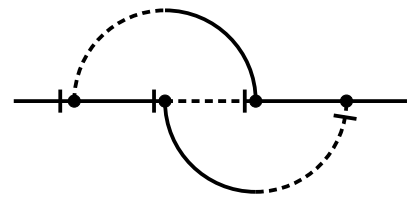


Figure 150:  
0B\_bB\_vvbB|vV\_bbvV|bb|0b

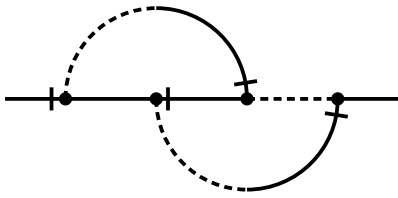


Figure 151:  
0B\_bb\_vvbB|Bb\_vvbB|vv|0b

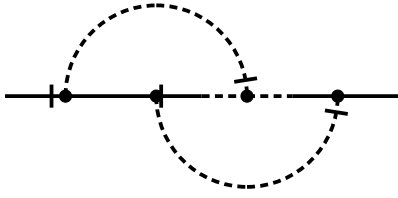


Figure 152:  
0B\_bb\_vvvV|Bv\_vvvV|vb|0b

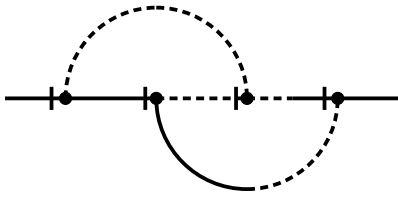


Figure 153:  
0B\_bB\_vvvv|vV\_bbvV|vB|0b

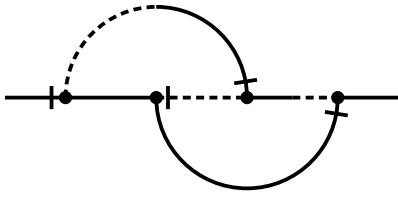


Figure 154:  
0B\_bb\_vvbB|Vv\_bbbB|bv|0b

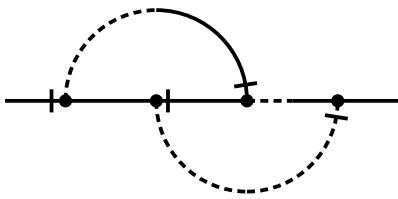


Figure 155:  
0B\_bb\_vvbB|Bb\_vvvV|vb|0b

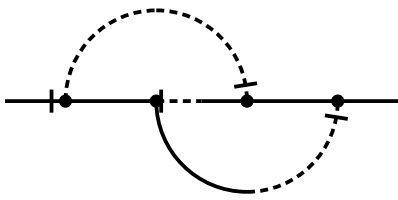


Figure 156:  
0B\_bb\_vvvV|Vb\_bbvV|bb|0b

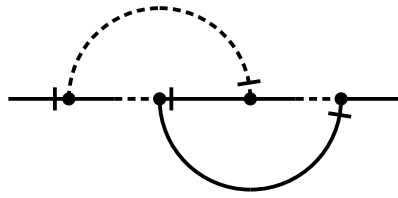


Figure 157:  
0B\_bv\_vvvV|Bb\_bbbB|bv|0b

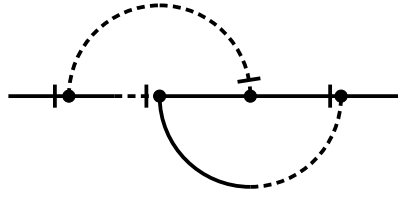


Figure 158:  
0B\_bV\_vvvV|bb\_bbvV|bB|0b

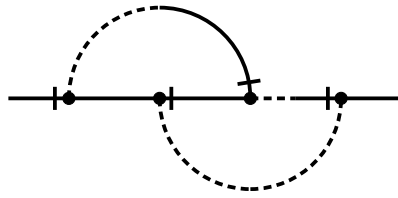


Figure 159:  
0B\_bb\_vvbB|Bb\_vvvv|vB|0b

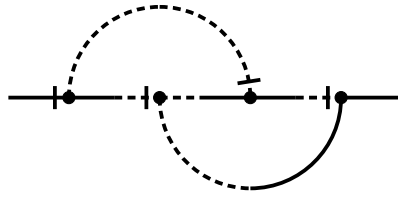


Figure 160:  
0B\_bV\_vvvV|vb\_vvbB|bV|0b

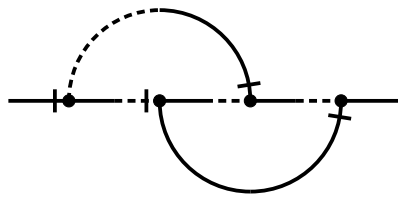


Figure 161:  
0B\_bV\_vvbB|bv\_bbbB|bv|0b

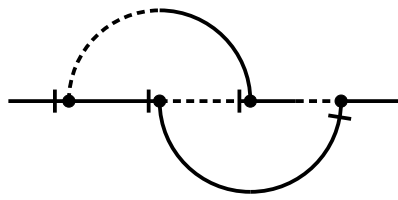


Figure 162:  
0B\_bB\_vvbB|vV\_bbbB|bv|0b

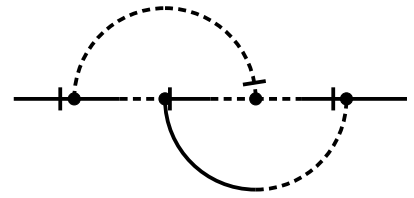


Figure 163:  
0B\_bv\_vvvV|Bv\_bbvV|vB|0b

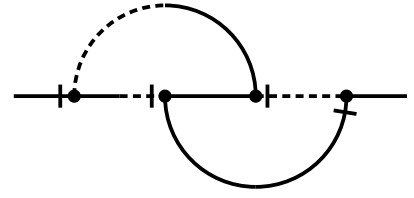


Figure 164:  
0B\_bV\_vvbB|bb\_bbbB|Vv|0b

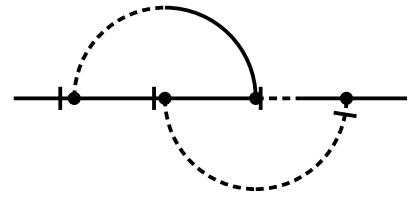


Figure 165:  
0B\_bB\_vvbB|bb\_vvvV|Vb|0b

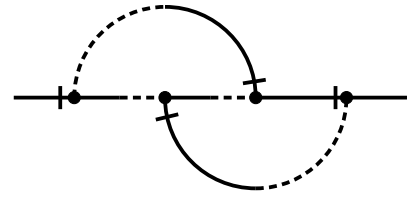


Figure 166:  
0B\_bv\_vvbB|bv\_BbvV|bB|0b

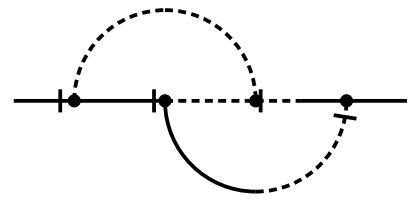


Figure 167:  
0B\_bB\_vvvv|vv\_bbvV|Vb|0b

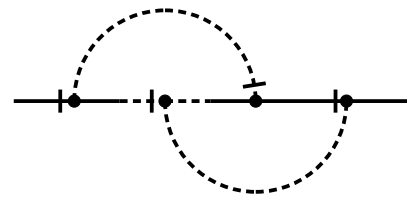


Figure 168:  
0B\_bV\_vvvV|vb\_vvvv|bB|0b

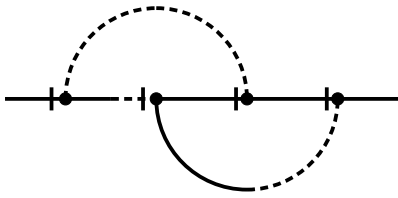


Figure 169:  
0B\_bV\_vvvv|bB\_bbv|bB|0b

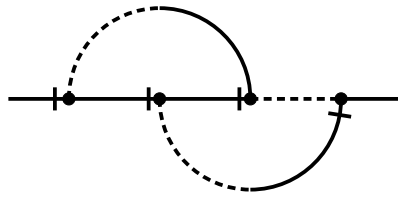


Figure 175:  
0B\_bB\_vvbb|bB\_vvbB|vv|0b

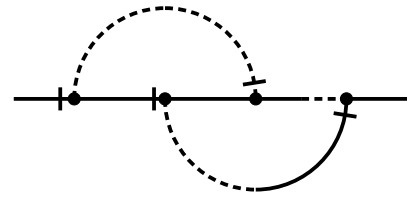


Figure 181:  
0B\_bB\_vvvV|bb\_vvbB|bv|0b

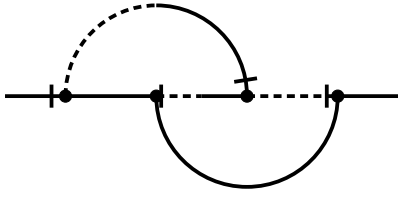


Figure 170:  
0B\_bb\_vvbB|Vb\_bbbb|vV|0b

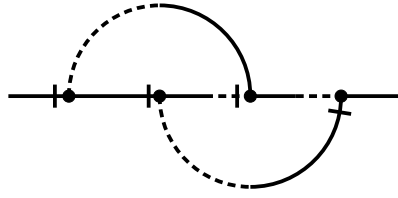


Figure 176:  
0B\_bB\_vvbb|bV\_vvbB|bv|0b

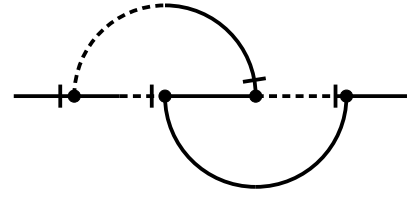


Figure 182:  
0B\_bV\_vvbB|bb\_bbbb|vV|0b

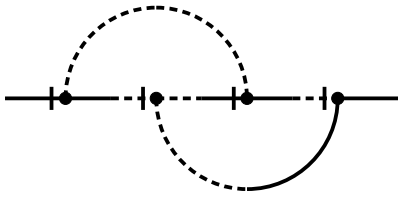


Figure 171:  
0B\_bV\_vvvv|vB\_vvb|bV|0b

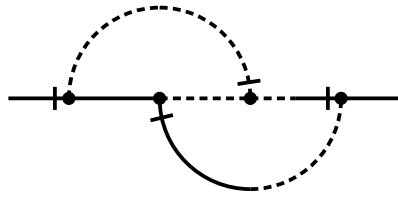


Figure 177:  
0B\_bb\_vvvV|vv\_Bbv|vB|0b

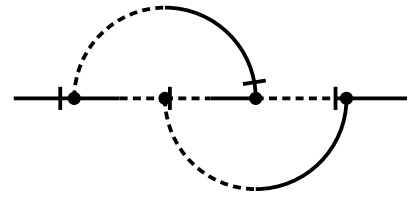


Figure 183:  
0B\_bv\_vvbB|Vb\_vvb|vV|0b

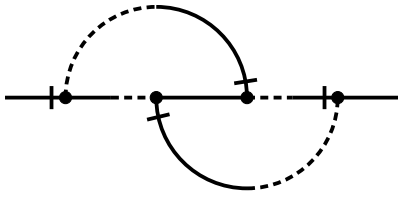


Figure 172:  
0B\_bv\_vvbB|bb\_Bbv|vB|0b

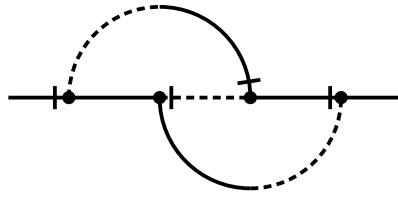


Figure 178:  
0B\_bb\_vvbB|Vv\_bbv|bB|0b

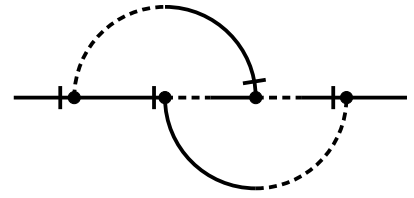


Figure 184:  
0B\_bB\_vvbB|vb\_bbv|vB|0b

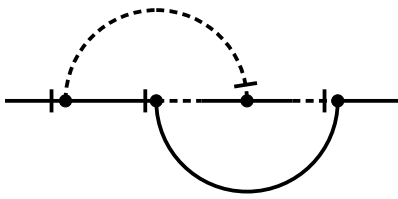


Figure 173:  
0B\_bB\_vvvV|vb\_bbbb|bV|0b

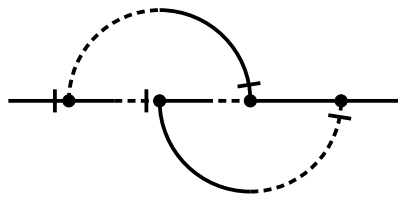


Figure 179:  
0B\_bV\_vvbB|bv\_bbvV|bb|0b

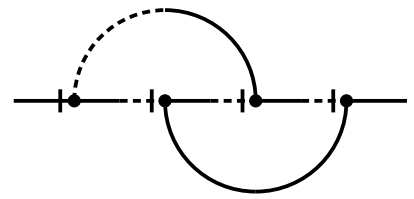


Figure 185:  
0B\_bV\_vvbB|bV\_bbbb|bV|0b

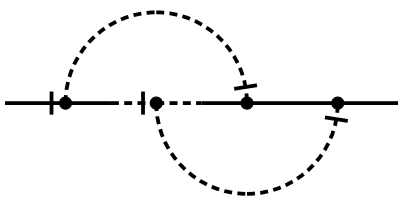


Figure 174:  
0B\_bV\_vvvV|vb\_vvvV|bb|0b

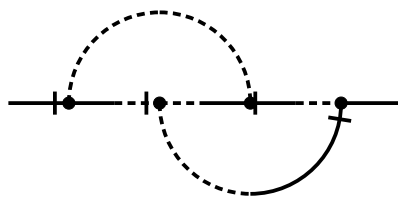


Figure 180:  
0B\_bV\_vvvv|vb\_vvbB|Bv|0b

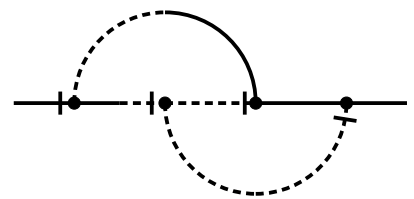


Figure 186:  
0B\_bV\_vvbB|vV\_vvvV|bb|0b

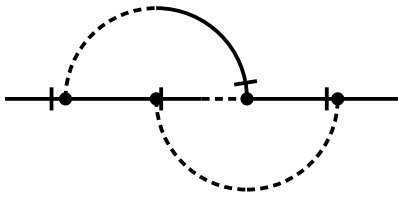


Figure 187:  
0B\_bb\_vvbB|Bv\_vvvv|bB|0b

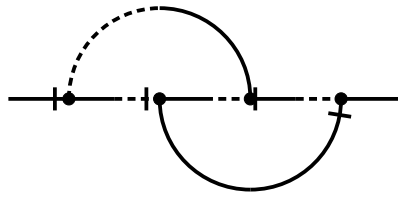


Figure 193:  
0B\_bV\_vvbb|bv\_bbbB|Bv|0b

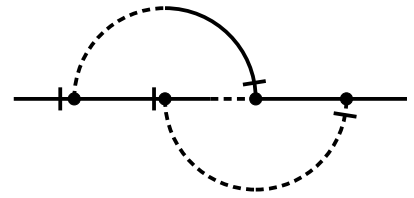


Figure 199:  
0B\_bB\_vvbB|bv\_vvvV|bb|0b

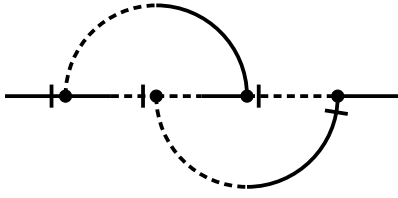


Figure 188:  
0B\_bV\_vvbb|vb\_vvbB|Vv|0b

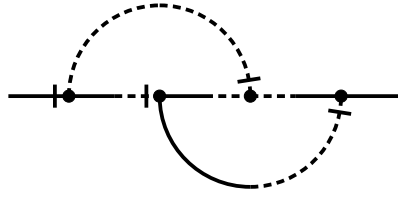


Figure 194:  
0B\_bV\_vvvV|bv\_bbvV|vb|0b

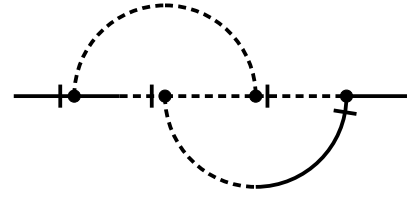


Figure 200:  
0B\_bV\_vvvv|vv\_vvbB|Vv|0b

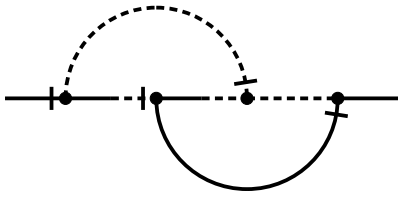


Figure 189:  
0B\_bV\_vvvV|bv\_bbbB|vv|0b

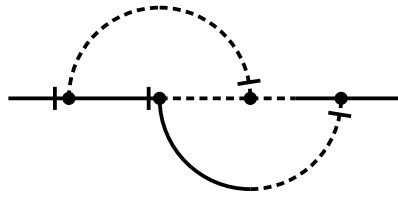


Figure 195:  
0B\_bB\_vvvV|vv\_bbvV|vb|0b

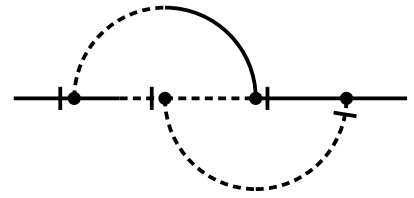


Figure 201:  
0B\_bV\_vvbb|vv\_vvvV|Bb|0b

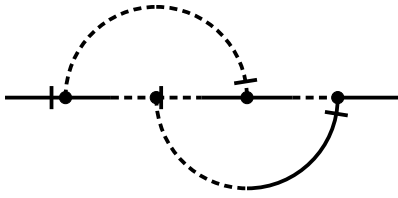


Figure 190:  
0B\_bv\_vvvV|Vb\_vvbB|bv|0b

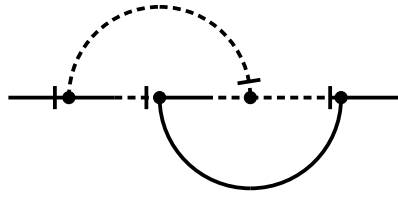


Figure 196:  
0B\_bV\_vvvV|bv\_bbbb|vV|0b

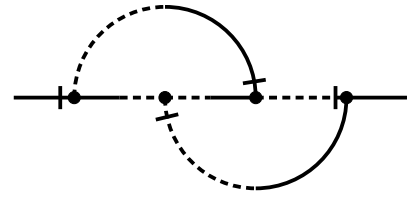


Figure 202:  
0B\_bv\_vvbB|vb\_Vvbb|vV|0b

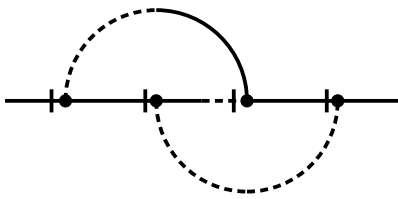


Figure 191:  
0B\_bB\_vvbb|bV\_vvvv|bB|0b

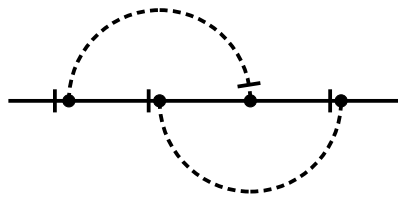


Figure 197:  
0B\_bB\_vvvV|bb\_vvvv|bB|0b

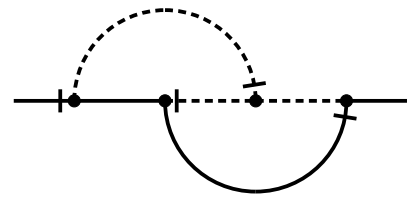


Figure 203:  
0B\_bb\_vvvV|Vv\_bbbB|vv|0b

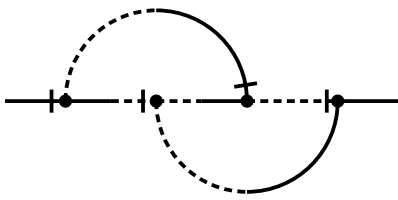


Figure 192:  
0B\_bV\_vvbB|vb\_vvbb|vV|0b

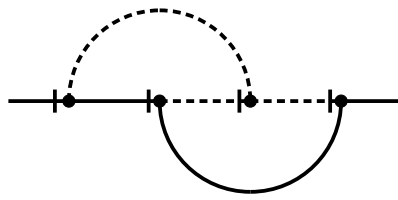


Figure 198:  
0B\_bB\_vvvv|vV\_bbbb|vV|0b

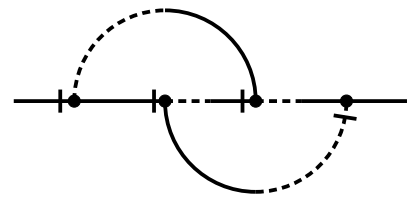


Figure 204:  
0B\_bB\_vvbb|vB\_bbvV|vb|0b

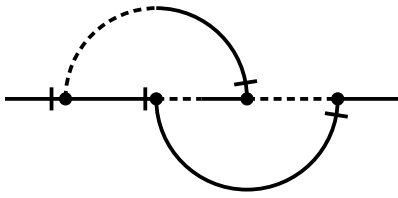


Figure 205:  
0B\_bB\_vvbB|vb\_bbbB|vv|0b

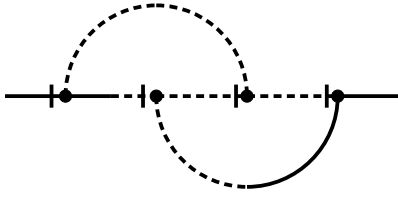


Figure 206:  
0B\_bV\_vvvv|vV\_vvbb|vV|0b

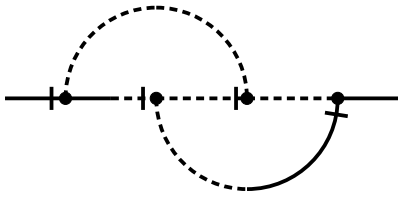


Figure 207:  
0B\_bV\_vvvv|vV\_vvbB|vv|0b

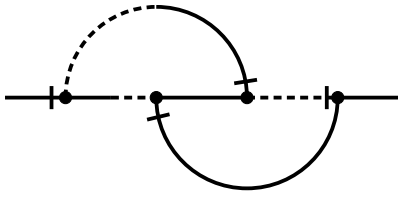


Figure 208:  
0B\_bv\_vvbB|bb\_Bbbb|vV|0b

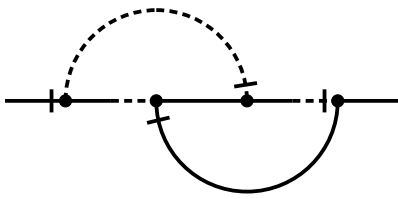


Figure 209:  
0B\_bv\_vvvV|bb\_Bbbb|bV|0b

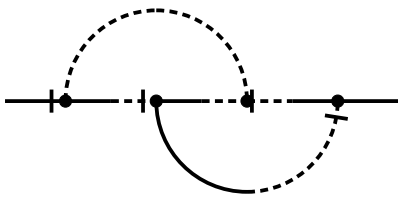


Figure 210:  
0B\_bV\_vvvv|bv\_bbvV|Vb|0b

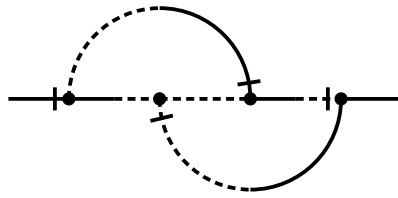


Figure 211:  
0B\_bv\_vvbB|vv\_Vvbb|bV|0b

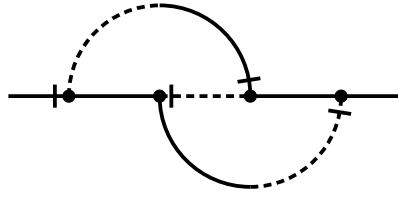


Figure 212:  
0B\_bb\_vvbB|Vv\_bbvV|bb|0b

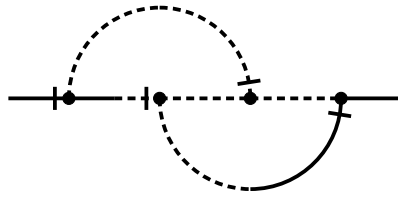


Figure 213:  
0B\_bV\_vvvV|vv\_vvbB|vv|0b

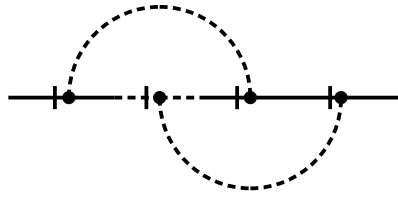


Figure 214:  
0B\_bV\_vvvv|vB\_vvvv|bB|0b

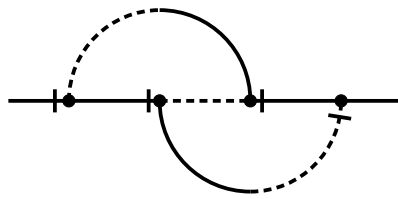


Figure 215:  
0B\_bB\_vvbb|vv\_bbvV|Bb|0b

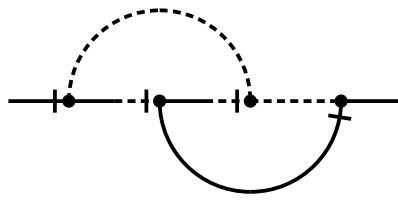


Figure 216:  
0B\_bV\_vvvv|bV\_bbbB|vv|0b

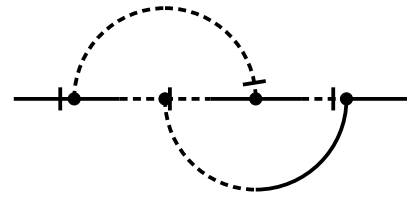


Figure 217:  
0B\_bv\_vvvV|Vb\_vvbb|bV|0b

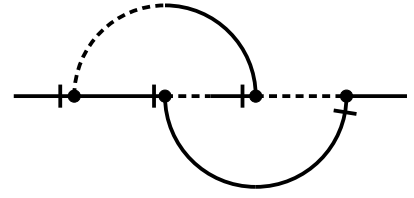


Figure 218:  
0B\_bB\_vvbb|vB\_bbbB|vv|0b

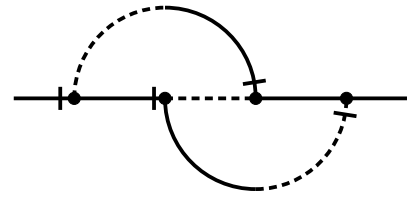


Figure 219:  
0B\_bB\_vvbB|vv\_bbvV|bb|0b

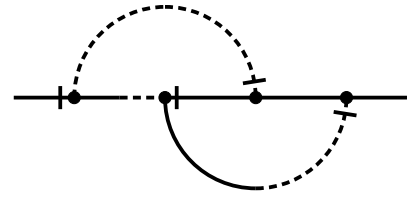


Figure 220:  
0B\_bv\_vvvV|Bb\_bbvV|bb|0b

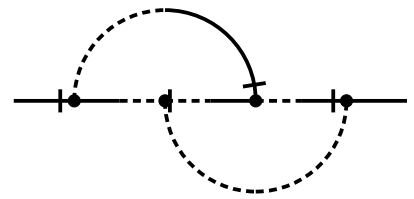


Figure 221:  
0B\_bv\_vvbB|Vb\_vvvv|vB|0b

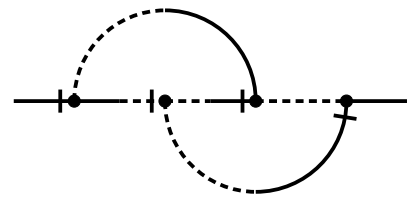


Figure 222:  
0B\_bV\_vvbb|vB\_vvbB|vv|0b

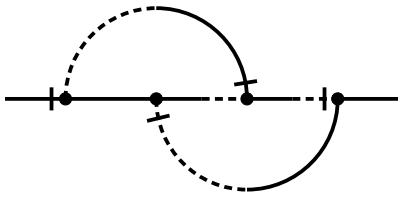


Figure 223:  
0B\_bb\_vvbB|bv\_Vvbb|bV|0b

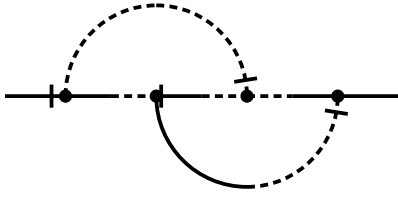


Figure 224:  
0B\_bv\_vvvV|Bv\_bbvV|vb|0b

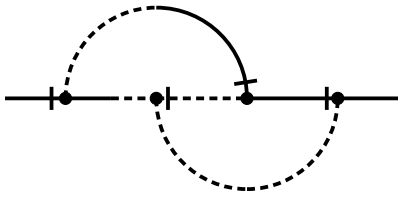


Figure 225:  
0B\_bv\_vvbB|Vv\_vvvv|bB|0b

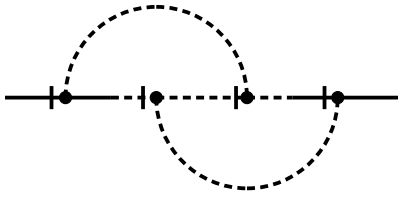


Figure 226:  
0B\_bV\_vvvv|vV\_vvvv|vB|0b

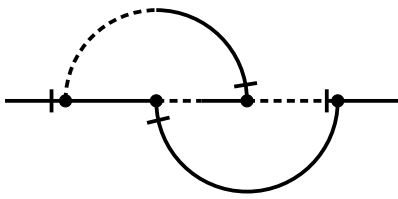


Figure 227:  
0B\_bb\_vvbB|vb\_Bbbb|vV|0b

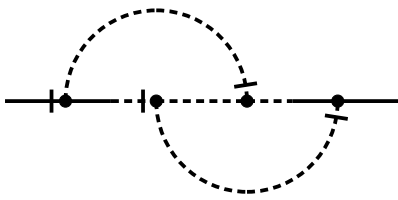


Figure 228:  
0B\_bV\_vvvV|vv\_vvvV|vb|0b

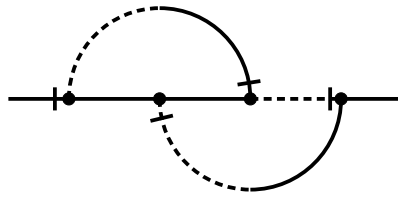


Figure 229:  
0B\_bb\_vvbB|bb\_Vvbb|vV|0b

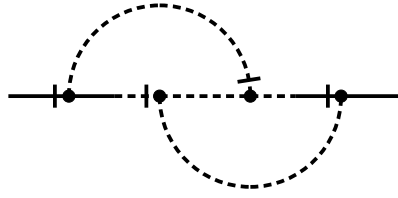


Figure 230:  
0B\_bV\_vvvV|vv\_vvvv|vB|0b

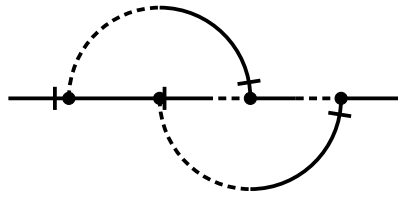


Figure 231:  
0B\_bb\_vvbB|Bv\_vvbB|bv|0b

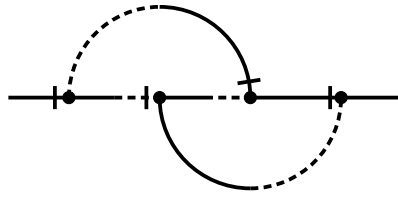


Figure 232:  
0B\_bV\_vvbB|bv\_bbvV|bB|0b

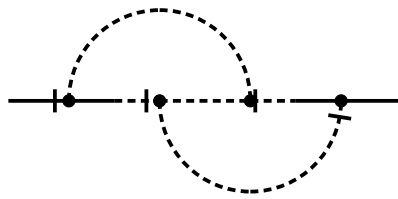


Figure 233:  
0B\_bV\_vvvv|vv\_vvvV|Vb|0b

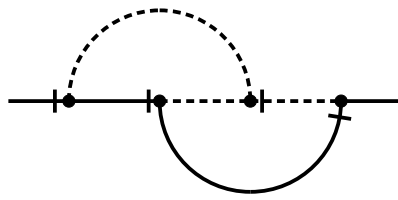


Figure 234:  
0B\_bB\_vvvv|vv\_bbbB|Vv|0b

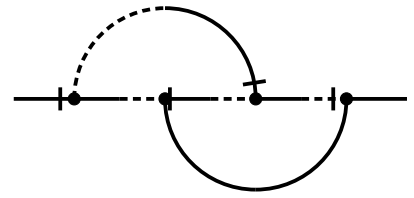


Figure 235:  
0B\_bv\_vvbB|Bv\_bbbb|bV|0b

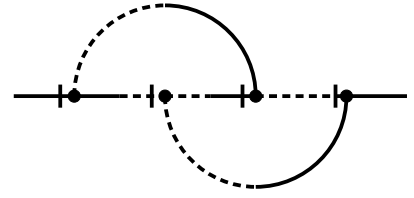


Figure 236:  
0B\_bV\_vvbB|vB\_vvbB|vV|0b

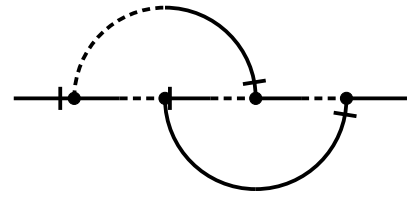


Figure 237:  
0B\_bv\_vvbB|Bv\_bbbB|bv|0b

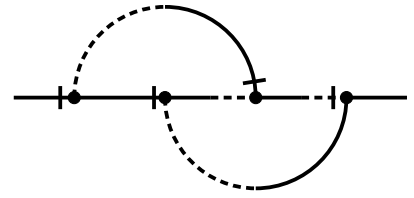


Figure 238:  
0B\_bB\_vvbB|bv\_vvbB|bV|0b

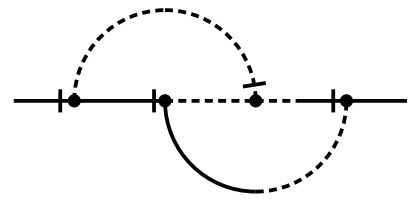


Figure 239:  
0B\_bB\_vvvV|vv\_bbvV|vB|0b

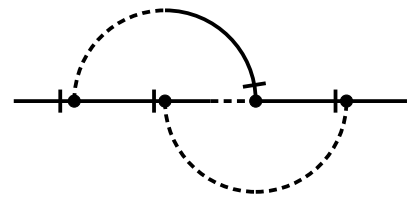


Figure 240:  
0B\_bB\_vvbB|bv\_vvvv|bB|0b

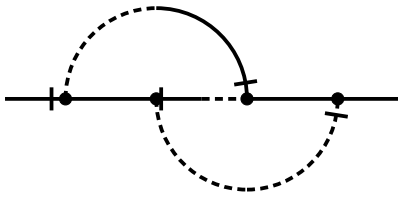


Figure 241:  
0B\_bb\_vvbB|Bv\_vvvV|bb|0b

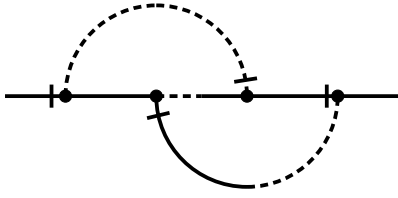


Figure 242:  
0B\_bb\_vvvV|vb\_BbvV|bB|0b

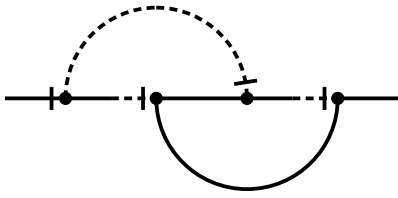


Figure 243:  
0B\_bV\_vvvV|bb\_bbbb|bV|0b

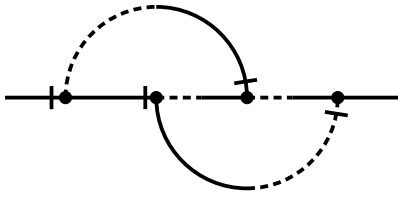


Figure 244:  
0B\_bB\_vvbB|vb\_bbvV|vb|0b

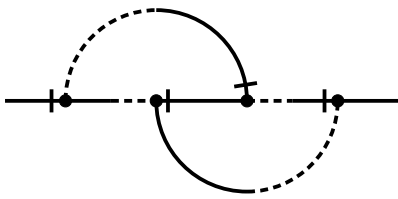


Figure 245:  
0B\_bv\_vvbB|Bb\_bbvV|vB|0b

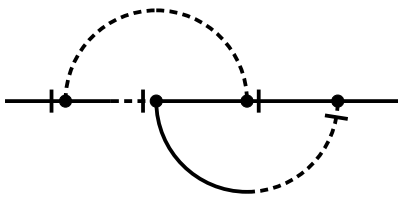


Figure 246:  
0B\_bV\_vvvV|bb\_bbvV|Bb|0b

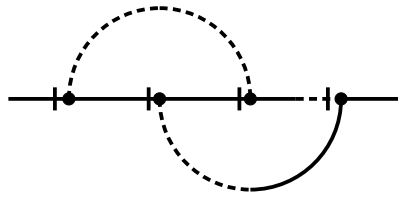


Figure 247:  
0B\_bB\_vvvv|bB\_vvbb|bV|0b

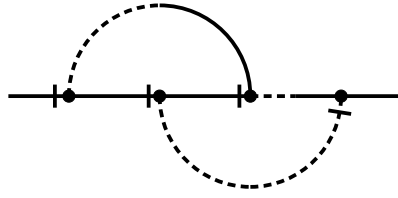


Figure 248:  
0B\_bB\_vvvb|bB\_vvvV|vb|0b

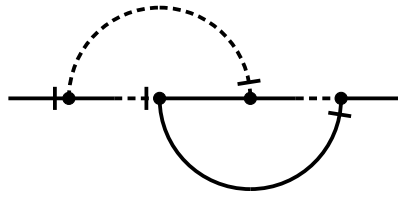


Figure 249:  
0B\_bV\_vvvV|bb\_bbbB|bv|0b

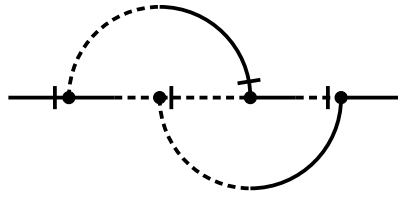


Figure 250:  
0B\_bv\_vvbB|Vv\_vvbb|bV|0b

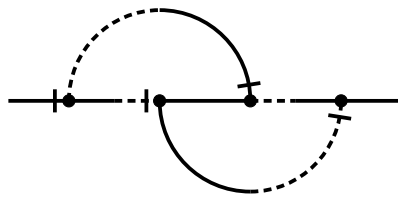


Figure 251:  
0B\_bV\_vvbB|bb\_bbvV|vb|0b

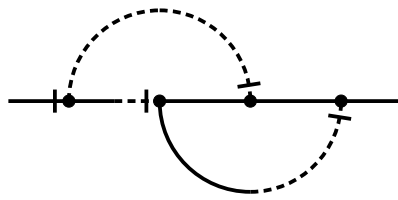


Figure 252:  
0B\_bV\_vvvV|bb\_bbvV|bb|0b

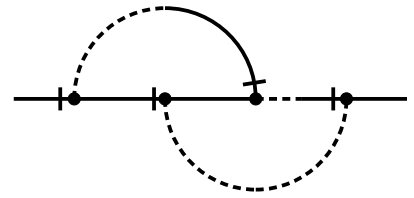


Figure 253:  
0B\_bB\_vvbB|bb\_vvvv|vB|0b

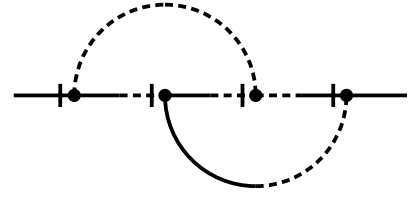


Figure 254:  
0B\_bV\_vvvv|bV\_bbvv|vB|0b

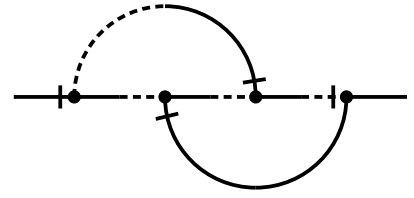


Figure 255:  
0B\_bv\_vvbB|bv\_Bbbb|bV|0b

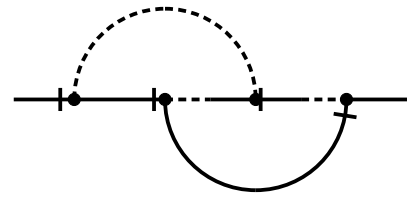


Figure 256:  
0B\_bB\_vvvv|vb\_bbbB|Bv|0b

## 2 Diagrams of topological type e13|22|3|e

There are 232 diagrams of such a topology.

### 2.1 Diagrams with symmetry factor equal to 1

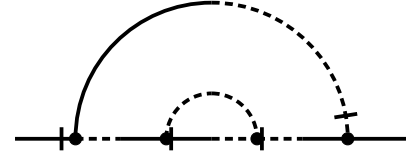


Figure 257:  
0B\_vb\_bbvV|Bv\_vvvv|Vb|0b

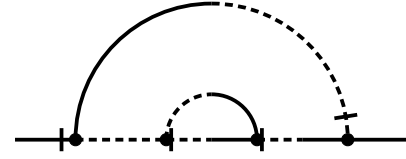


Figure 258:  
0B\_vv\_bbvV|Vb\_vvbb|Vb|0b

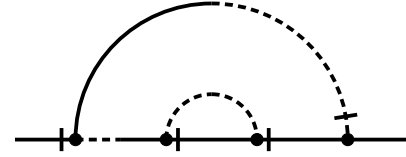


Figure 259:  
0B\_vb\_bbvV|Bb\_vvvv|Bb|0b

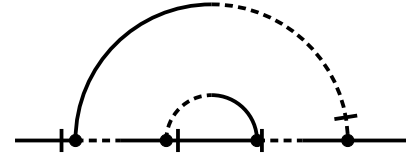


Figure 260:  
0B\_vb\_bbvV|Bb\_vvbb|Vb|0b

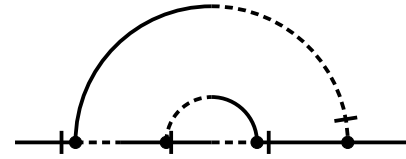


Figure 261:  
0B\_vb\_bbvV|Bv\_vvbb|Bb|0b

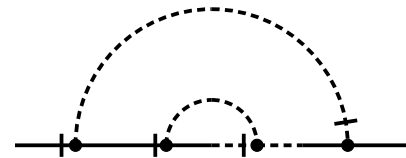


Figure 262:  
0B\_bB\_vvvV|bV\_vvvv|vb|0b

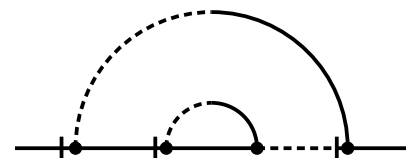


Figure 263:  
0B\_bB\_vvbb|bb\_vvbb|vV|0b

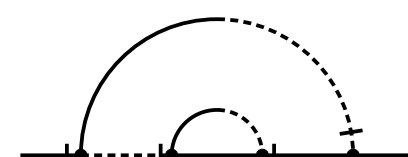


Figure 264:  
0B\_vV\_bbvV|bb\_bbvV|Bb|0b



Figure 265:  
0B\_bV\_vvbb|vB\_vvbb|vv|0b

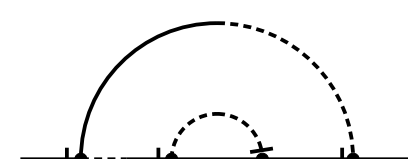


Figure 266:  
0B\_vB\_bbvV|bb\_vvvV|bB|0b



Figure 267:  
0B\_bB\_vvbb|bB\_vvvv|bv|0b



Figure 268:  
0B\_bb\_vvbb|Bb\_vvbb|Vv|0b



Figure 269:  
0B\_bv\_vvvV|Vv\_vvbb|Bb|0b

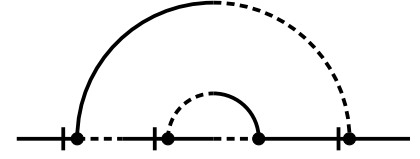


Figure 270:  
0B\_vB\_bbvV|bv\_vvbb|bB|0b

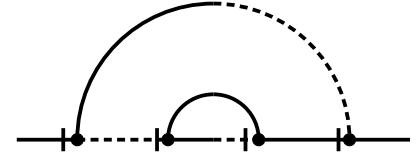


Figure 271:  
0B\_vV\_bbvV|bV\_bbbb|bB|0b

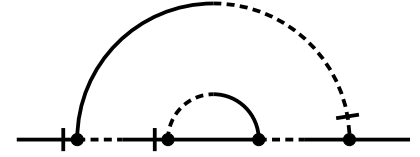


Figure 272:  
0B\_vB\_bbvV|bb\_vvbb|vb|0b

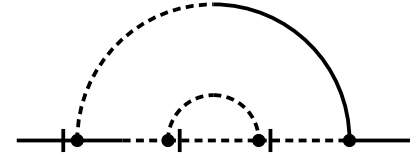


Figure 273:  
0B\_bv\_vvbb|Vv\_vvvv|Vv|0b

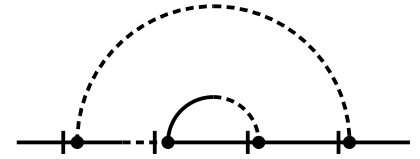


Figure 274:  
0B\_bV\_vvvv|bB\_bbvV|bB|0b

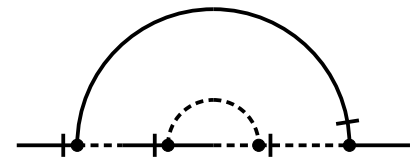


Figure 275:  
0B\_vB\_bbbB|bv\_vvvv|Vv|0b

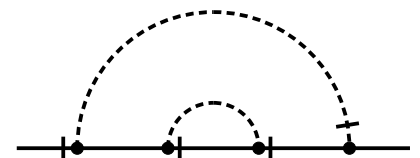




Figure 276:  
0B\_bb\_vvvV|Bb\_vvvv|Bb|0b

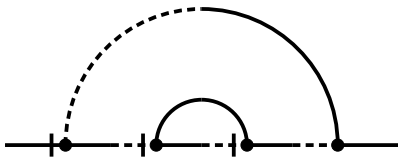


Figure 277:  
0B\_bV\_vvbb|bV\_bbbb|bv|0b

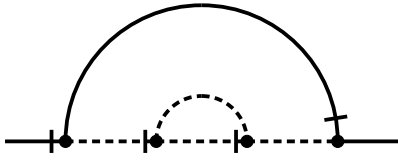


Figure 278:  
0B\_vV\_bbbb|vV\_vvvv|vv|0b

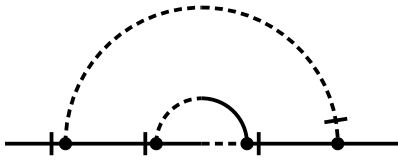


Figure 279:  
0B\_bB\_vvvV|bv\_vvbb|Bb|0b

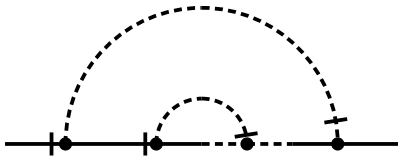


Figure 280:  
0B\_bB\_vvvV|bv\_vvvV|vb|0b

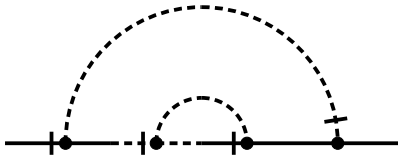


Figure 281:  
0B\_bV\_vvvV|vB\_vvvv|bb|0b

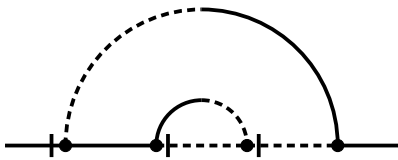


Figure 282:  
0B\_bb\_vvbb|Vv\_bbbv|Vv|0b

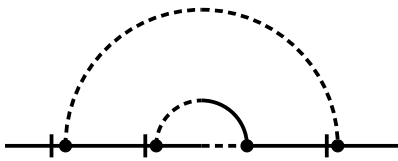


Figure 283:  
0B\_bB\_vvvv|bv\_vvbb|bB|0b

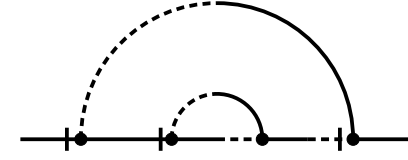
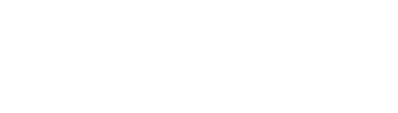


Figure 284:  
0B\_bB\_vvbb|bv\_vvbb|bV|0b

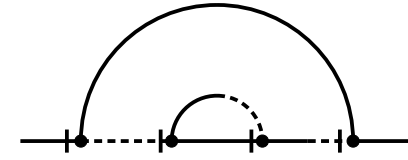


Figure 285:  
0B\_vV\_bbbb|bB\_bbbv|bV|0b

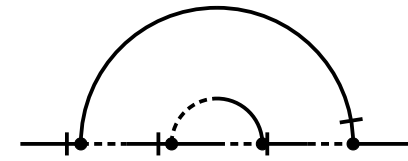


Figure 286:  
0B\_vB\_bbbb|bv\_vvbb|Bv|0b

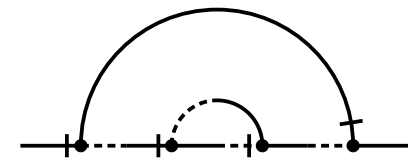


Figure 287:  
0B\_vB\_bbbb|bV\_vvbb|bv|0b

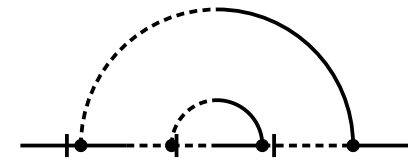


Figure 288:  
0B\_bv\_vvbb|Vb\_vvbb|Vv|0b

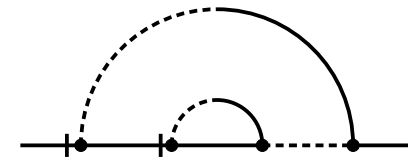


Figure 289:  
0B\_bB\_vvbb|bb\_vvbb|vv|0b

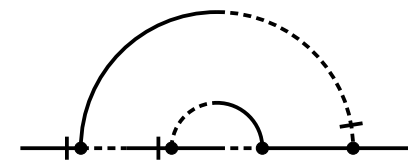


Figure 290:  
0B\_vB\_bbbV|bv\_vvbb|bb|0b

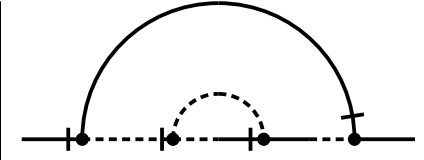


Figure 291:  
0B\_vV\_bbbb|vB\_vvvv|bv|0b

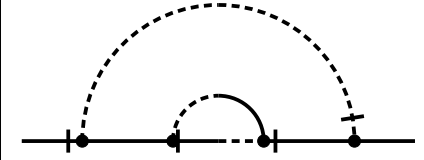


Figure 292:  
0B\_bb\_vvvV|Bv\_vvbb|Bb|0b

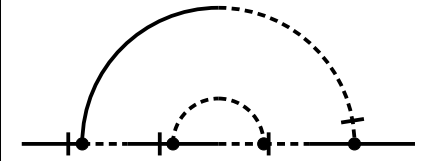


Figure 293:  
0B\_vB\_bbbV|bv\_vvvv|Vb|0b

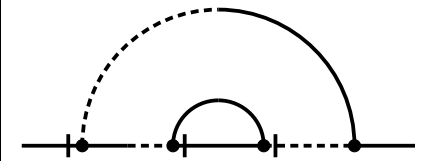


Figure 294:  
0B\_bv\_vvbb|Bb\_bbbb|Vv|0b

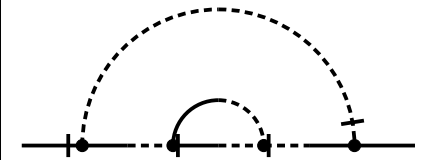


Figure 295:  
0B\_bv\_vvvV|Bv\_bbbv|Vb|0b

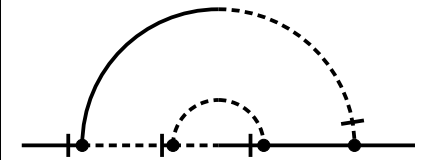


Figure 296:  
0B\_vV\_bbbV|vB\_vvvv|bb|0b

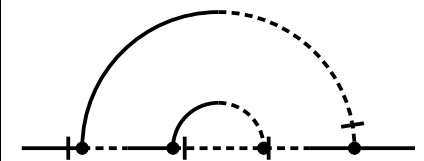


Figure 297:  
0B\_vb\_bbbV|Vv\_bbbv|Vb|0b

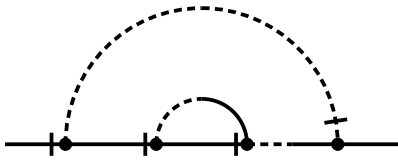


Figure 298:  
0B\_bB\_vvvV|bB\_vvbb|vb|0b

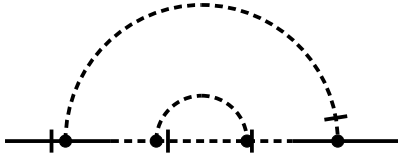


Figure 299:  
0B\_bv\_vvvV|Vv\_vvvv|Vb|0b

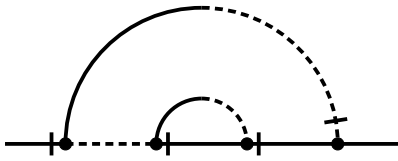


Figure 300:  
0B\_vv\_bbvV|Bb\_bbvv|Bb|0b

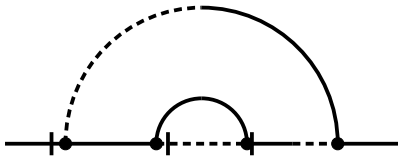


Figure 301:  
0B\_bb\_vvbb|Vv\_bbbb|Bv|0b

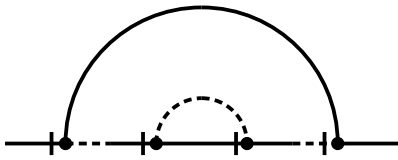


Figure 302:  
0B\_vB\_bbbb|bB\_vvvv|bV|0b

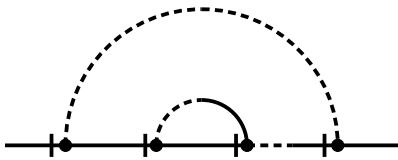


Figure 303:  
0B\_bB\_vvvv|bB\_vvbb|vB|0b

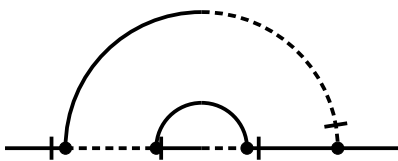


Figure 304:  
0B\_vv\_bbvV|Bv\_bbbb|Bb|0b

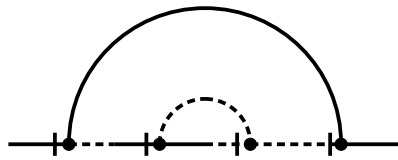


Figure 305:  
0B\_vB\_bbbb|bV\_vvvv|vV|0b

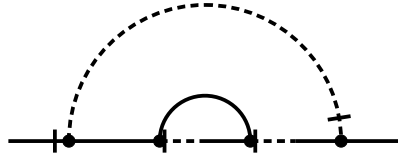


Figure 306:  
0B\_bb\_vvvV|Vb\_bbbb|Vb|0b

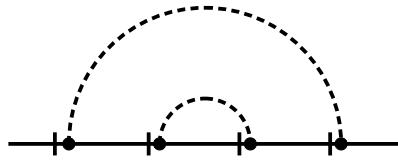


Figure 307:  
0B\_bB\_vvvv|bB\_vvvv|bB|0b

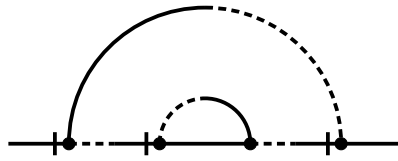


Figure 308:  
0B\_vB\_bbvv|bb\_vvbb|vB|0b

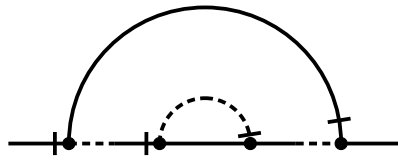


Figure 309:  
0B\_vB\_bbbB|bb\_vvvV|bv|0b

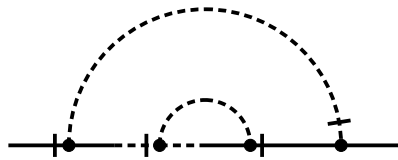


Figure 310:  
0B\_bV\_vvvV|vb\_vvvv|Bb|0b

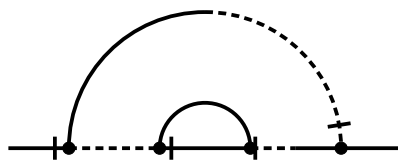


Figure 311:  
0B\_vv\_bbvV|Bb\_bbbb|Vb|0b

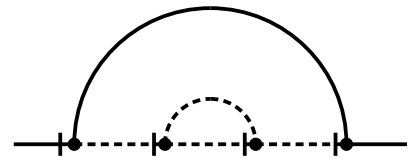


Figure 312:  
0B\_vV\_bbbb|vV\_vvvv|vV|0b

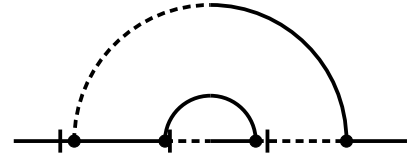


Figure 313:  
0B\_bb\_vvbb|Vb\_bbbb|Vv|0b

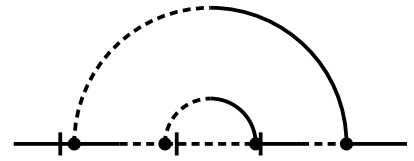


Figure 314:  
0B\_bv\_vvbb|Vv\_vvbb|Bv|0b

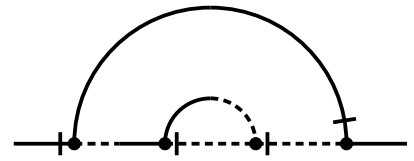


Figure 315:  
0B\_vb\_bbbB|Vv\_bbvv|Vv|0b

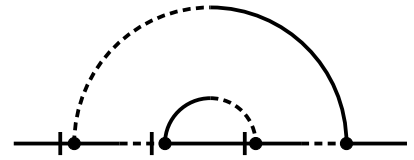


Figure 316:  
0B\_bV\_vvbb|bB\_bbvv|bv|0b

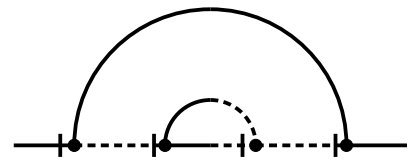


Figure 317:  
0B\_vV\_bbbb|bV\_bbvv|vV|0b

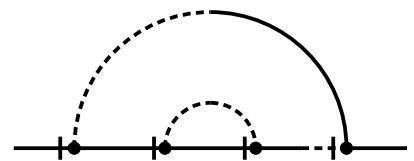


Figure 318:  
0B\_bB\_vvbb|bB\_vvvv|bV|0b

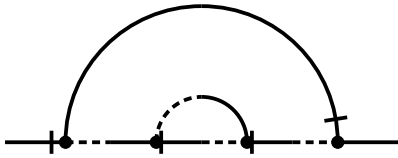


Figure 319:  
0B\_vb\_bbbB|Bv\_vvbb|Bv|0b

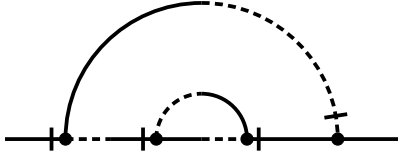


Figure 320:  
0B\_vB\_bbvV|bv\_vvbb|Bb|0b

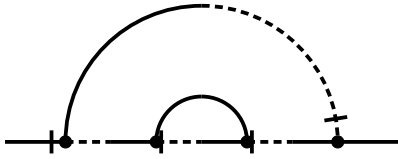


Figure 321:  
0B\_vb\_bbvV|Vb\_bbbb|Vb|0b

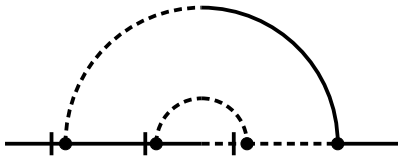


Figure 322:  
0B\_bB\_vvbb|bV\_vvvv|vv|0b

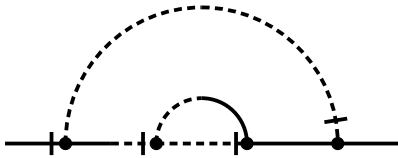


Figure 323:  
0B\_bV\_vvvV|vV\_vvbb|bb|0b

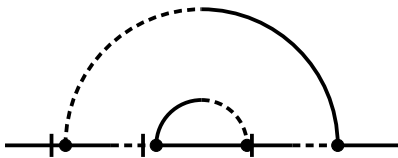


Figure 324:  
0B\_bV\_vvbb|bb\_bbvV|Bv|0b

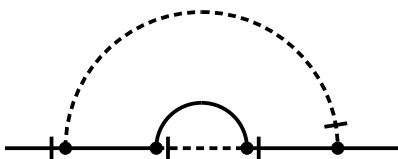


Figure 325:  
0B\_bb\_vvvV|Vv\_bbbb|Bb|0b

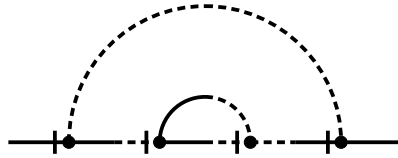


Figure 326:  
0B\_bV\_vvvv|bV\_bbvV|vB|0b

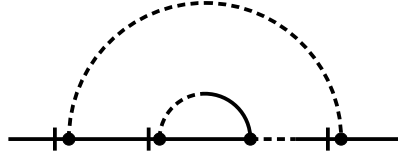


Figure 327:  
0B\_bB\_vvvv|bb\_vvbb|vB|0b

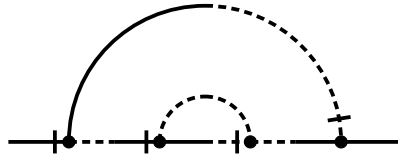


Figure 328:  
0B\_vB\_bbvV|bV\_vvvv|vb|0b

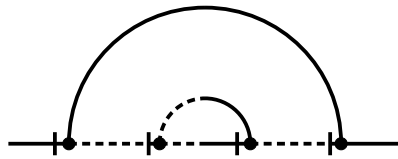


Figure 329:  
0B\_vV\_bbbb|vB\_vvbb|vV|0b

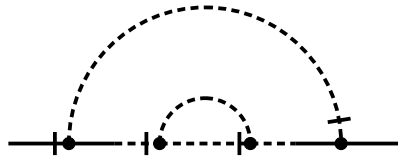


Figure 330:  
0B\_bV\_vvvV|vV\_vvvv|vb|0b

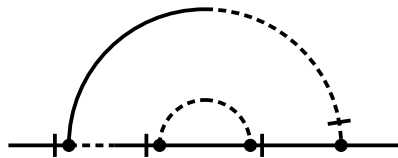


Figure 331:  
0B\_vB\_bbvV|bb\_vvvv|Bb|0b

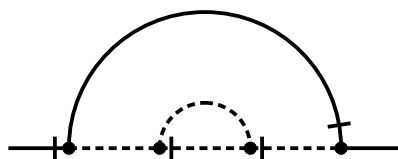


Figure 332:  
0B\_vv\_bbbB|Vv\_vvvv|Vv|0b

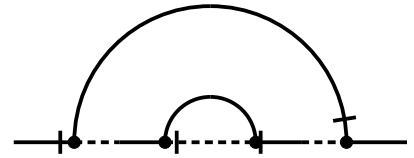


Figure 333:  
0B\_vb\_bbbB|Vv\_bbbb|Bv|0b

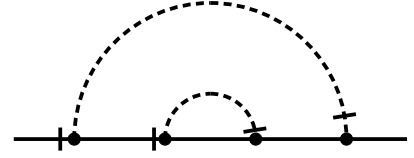


Figure 334:  
0B\_bB\_vvvV|bb\_vvvV|bb|0b

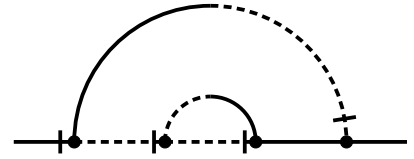


Figure 335:  
0B\_vV\_bbvV|vV\_vvbb|bb|0b

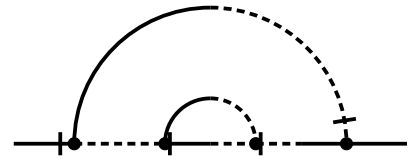


Figure 336:  
0B\_vv\_bbvV|Bv\_bbvV|Vb|0b

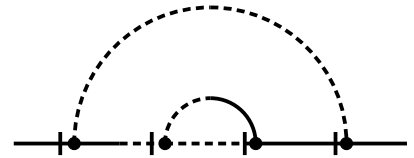


Figure 337:  
0B\_bV\_vvvv|vV\_vvbb|bB|0b

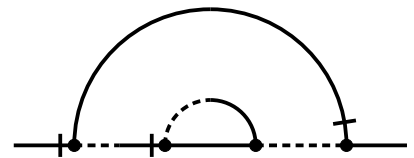


Figure 338:  
0B\_vB\_bbbB|bb\_vvbb|vv|0b

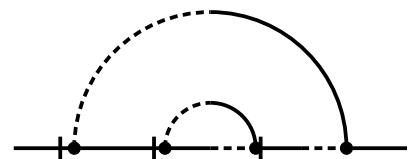


Figure 339:  
0B\_bB\_vvbb|bv\_vvbb|Bv|0b

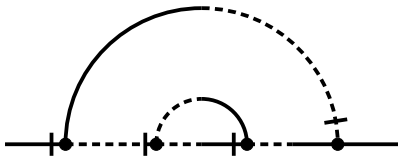


Figure 340:  
0B\_vV\_bbvV|vB\_vvbb|vb|0b

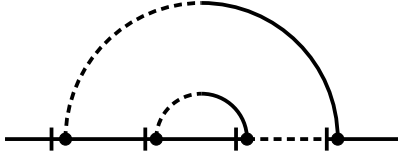


Figure 341:  
0B\_bB\_vvbb|bB\_vvbb|vV|0b

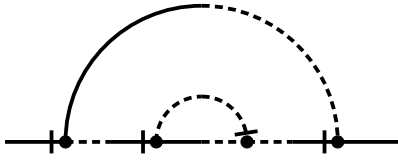


Figure 342:  
0B\_vB\_bbvV|bv\_vvvV|vB|0b

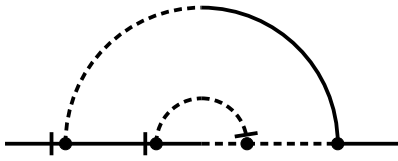


Figure 343:  
0B\_bB\_vvbb|bv\_vvvV|vv|0b

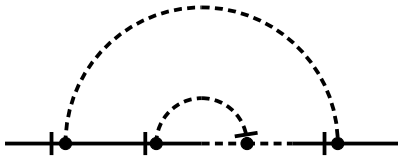


Figure 344:  
0B\_bB\_vvvv|bv\_vvvV|vB|0b

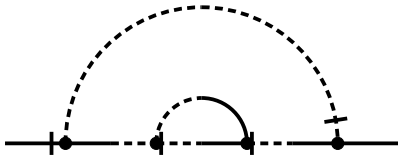


Figure 345:  
0B\_bv\_vvvV|Vb\_vvbb|Vb|0b

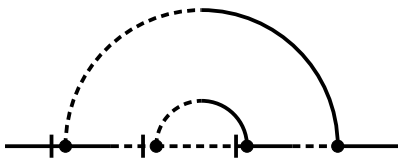


Figure 346:  
0B\_bV\_vvbb|vV\_vvbb|bv|0b

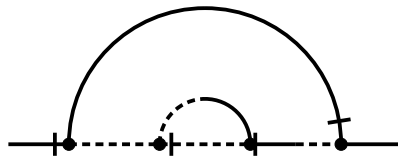


Figure 347:  
0B\_vv\_bbbB|Vv\_vvbb|Bv|0b

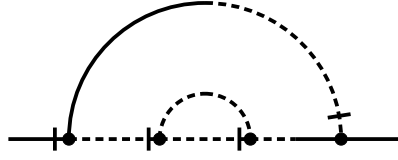


Figure 348:  
0B\_vV\_bbvV|vV\_vvvv|vb|0b

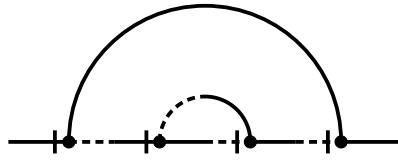


Figure 349:  
0B\_vB\_bbbb|bV\_vvbb|bV|0b

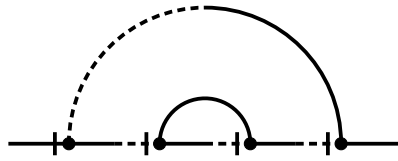


Figure 350:  
0B\_bV\_vvbb|bV\_bbbb|bV|0b

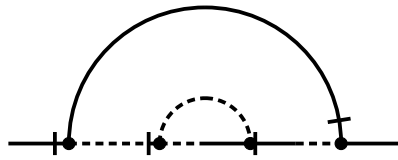


Figure 351:  
0B\_vV\_bbbB|vb\_vvvv|Bv|0b

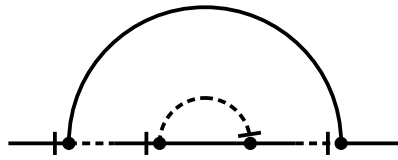


Figure 352:  
0B\_vB\_bbbb|bb\_vvvV|bV|0b

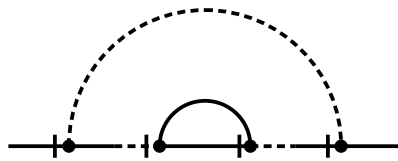


Figure 353:  
0B\_bV\_vvvv|bB\_bbbb|vB|0b

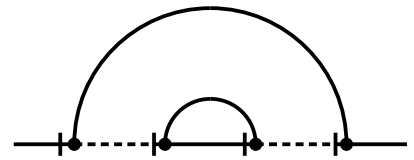


Figure 354:  
0B\_vV\_bbbb|bB\_bbbb|vV|0b

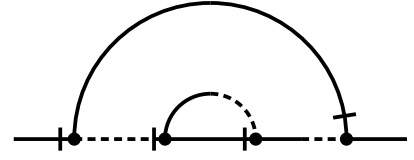


Figure 355:  
0B\_vV\_bbbB|bB\_bbvV|bv|0b

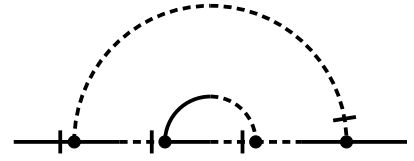


Figure 356:  
0B\_bV\_vvvV|bV\_bbvV|vb|0b

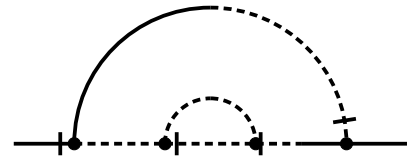


Figure 357:  
0B\_vv\_bbvV|Vv\_vvvv|Vb|0b

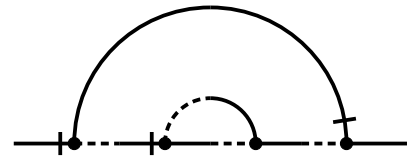


Figure 358:  
0B\_vB\_bbbB|bv\_vvbb|bv|0b

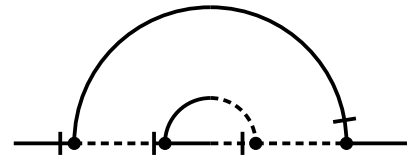


Figure 359:  
0B\_vV\_bbbB|bV\_bbvV|vv|0b

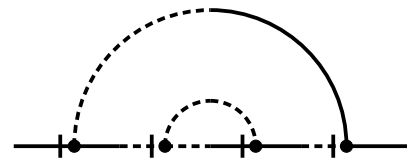


Figure 360:  
0B\_bV\_vvbb|vB\_vvvv|bV|0b

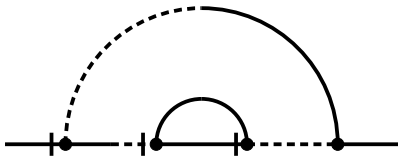


Figure 361:  
0B\_bV\_vvbb|bB\_bbbb|vv|0b

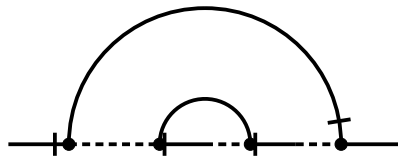


Figure 368:  
0B\_vv\_bbbbB|Bv\_bbbb|Bv|0b

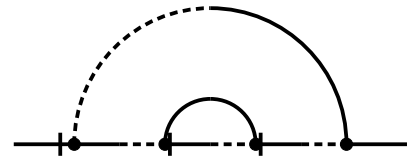


Figure 375:  
0B\_bv\_vvbb|Bv\_bbbb|Bv|0b

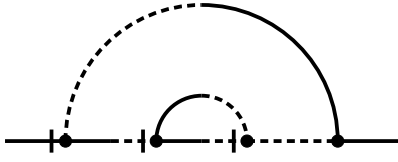


Figure 362:  
0B\_bV\_vvbb|bV\_bbv|vv|0b

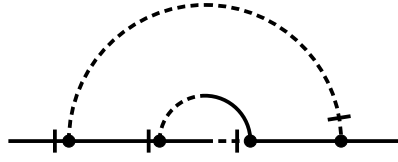


Figure 369:  
0B\_bB\_vvvV|bV\_vvbb|bb|0b

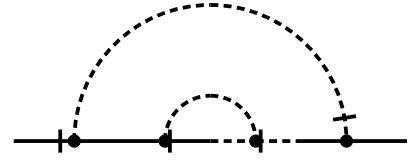


Figure 376:  
0B\_bb\_vvvV|Bv\_vvvv|Vb|0b

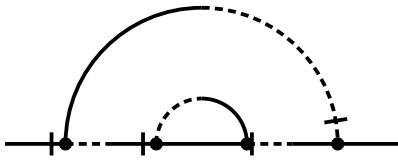


Figure 363:  
0B\_vB\_bbvV|bb\_vvbb|Vb|0b

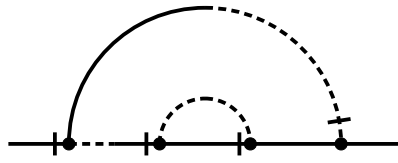


Figure 370:  
0B\_vB\_bbvV|bB\_vvvv|bb|0b

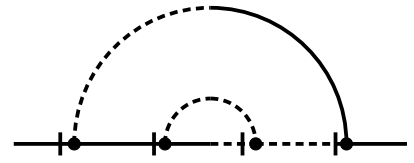


Figure 377:  
0B\_bB\_vvbb|bV\_vvvv|vV|0b

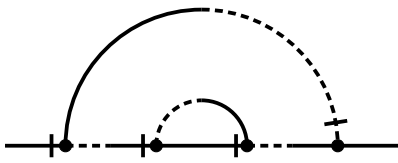


Figure 364:  
0B\_vB\_bbvV|bB\_vvbb|vb|0b

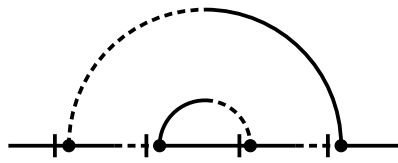


Figure 371:  
0B\_bV\_vvbb|bB\_bbv|bV|0b

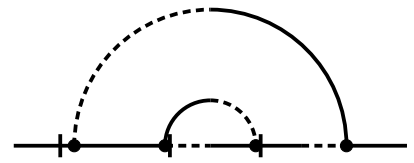


Figure 378:  
0B\_bb\_vvbb|Vb\_bbv|Bv|0b

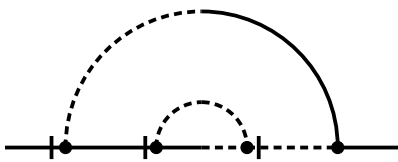


Figure 365:  
0B\_bB\_vvbb|bv\_vvvv|Vv|0b

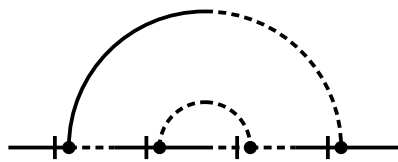


Figure 372:  
0B\_vB\_bbv|bV\_vvvv|vB|0b

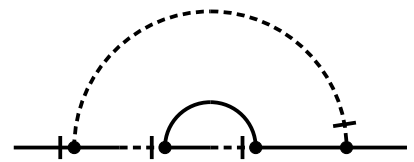


Figure 379:  
0B\_bV\_vvvV|bV\_bbbb|bb|0b

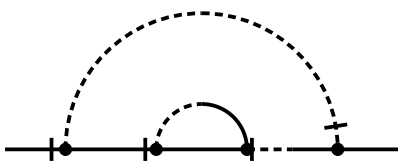


Figure 366:  
0B\_bB\_vvvV|bb\_vvbb|Vb|0b

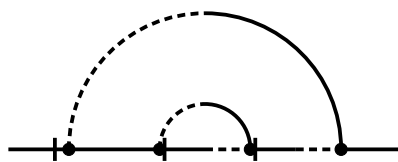


Figure 373:  
0B\_bb\_vvbb|Bv\_vvbb|Bv|0b

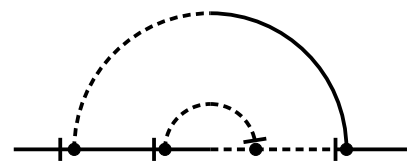


Figure 380:  
0B\_bB\_vvbb|bv\_vvvV|vV|0b

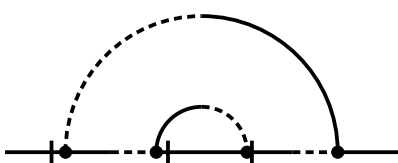


Figure 367:  
0B\_bv\_vvbb|Bb\_bbv|Bv|0b

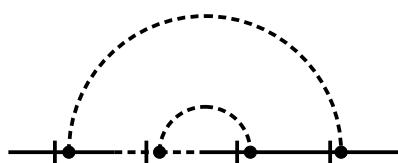


Figure 374:  
0B\_bV\_vvvv|vB\_vvvv|bB|0b

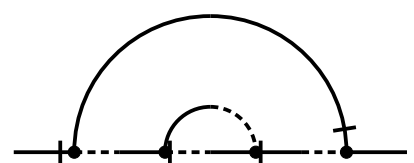


Figure 381:  
0B\_vb\_bbbB|Vb\_bbv|Bv|0b

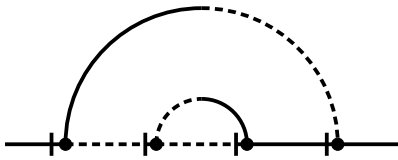


Figure 382:  
0B\_vV\_bbvV|vV\_vvbb|bB|0b

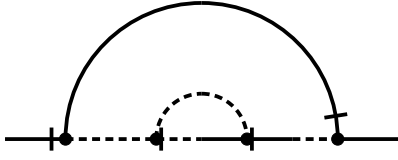


Figure 383:  
0B\_vv\_bbbB|Vb\_vvvv|Bv|0b

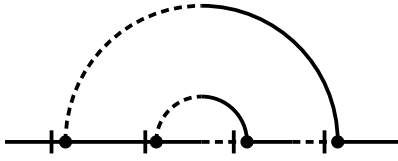


Figure 384:  
0B\_bB\_vvbb|bV\_vvbb|bV|0b

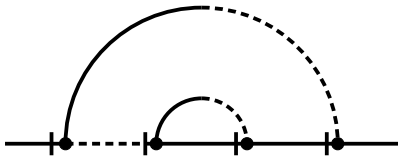


Figure 385:  
0B\_vV\_bbvV|bB\_bbvV|bB|0b

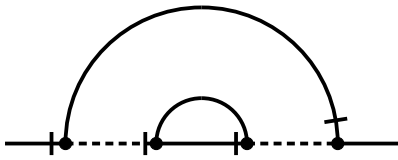


Figure 386:  
0B\_vV\_bbbB|bB\_bbbb|vv|0b

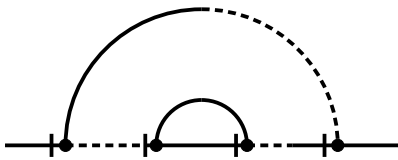


Figure 387:  
0B\_vV\_bbvV|bB\_bbbb|vB|0b

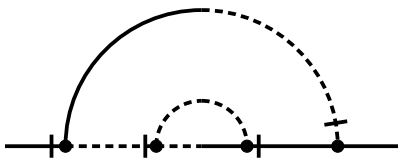


Figure 388:  
0B\_vV\_bbvV|vb\_vvvv|Bb|0b

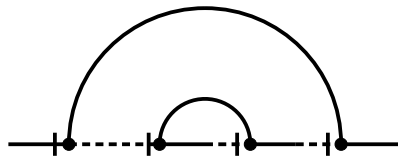


Figure 389:  
0B\_vV\_bbbb|bV\_bbbb|bV|0b

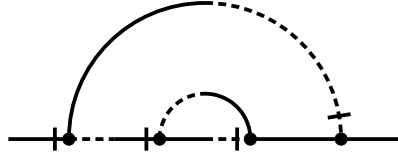


Figure 390:  
0B\_vB\_bbvV|bV\_vvbb|bb|0b

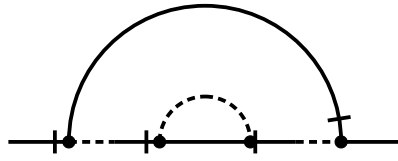


Figure 391:  
0B\_vB\_bbbB|bb\_vvvv|Bv|0b

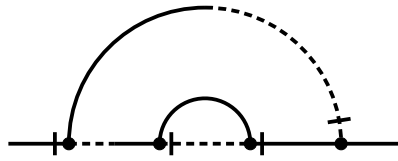


Figure 392:  
0B\_vb\_bbvV|Vv\_bbbb|Bb|0b

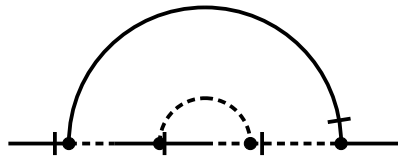


Figure 393:  
0B\_vb\_bbbB|Bv\_vvvv|Vv|0b

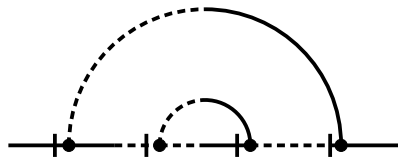


Figure 394:  
0B\_bV\_vvbb|vB\_vvbb|vV|0b

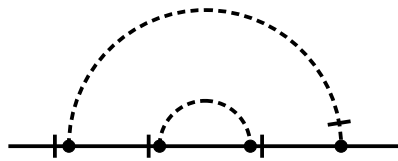


Figure 395:  
0B\_bB\_vvvV|bb\_vvvv|Bb|0b

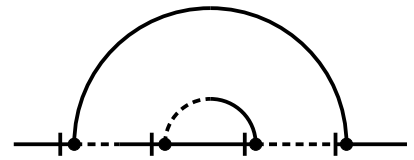


Figure 396:  
0B\_vB\_bbbb|bB\_vvbb|vV|0b

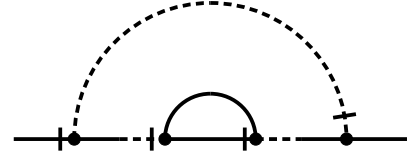


Figure 397:  
0B\_bV\_vvvV|bB\_bbbb|vb|0b

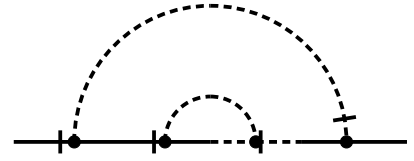


Figure 398:  
0B\_bB\_vvvV|bv\_vvvv|Vb|0b

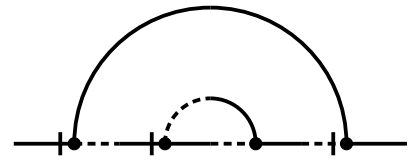


Figure 399:  
0B\_vB\_bbbb|bv\_vvbb|bV|0b

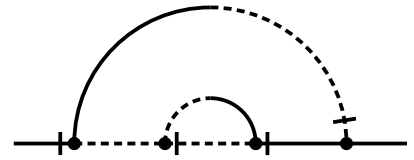


Figure 400:  
0B\_vv\_bbvV|Vv\_vvbb|Bb|0b

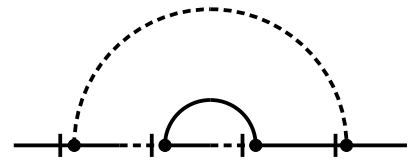


Figure 401:  
0B\_bV\_vvvv|bV\_bbbb|bB|0b

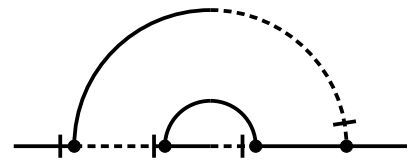


Figure 402:  
0B\_vV\_bbvV|bV\_bbbb|bb|0b

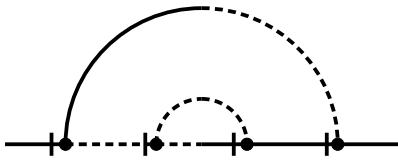


Figure 403:  
0B\_vV\_bbvv|vB\_vvvv|bB|0b

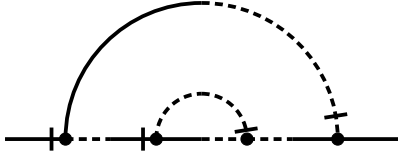


Figure 404:  
0B\_vB\_bbvV|bv\_vvvV|vb|0b

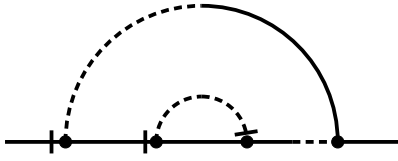


Figure 405:  
0B\_bB\_vvbb|bb\_vvvV|bv|0b

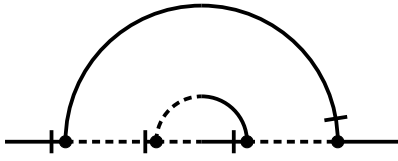


Figure 406:  
0B\_vV\_bbbB|vB\_vvbb|vv|0b

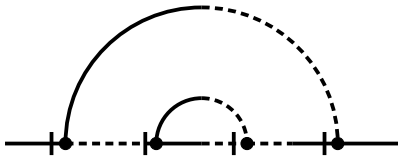


Figure 407:  
0B\_vV\_bbvv|bV\_bbvV|vB|0b

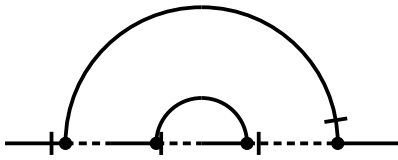


Figure 408:  
0B\_vb\_bbbB|Vb\_bbbb|Vv|0b

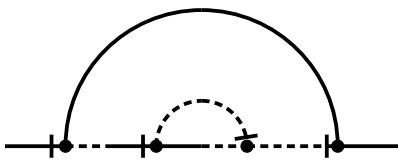


Figure 409:  
0B\_vB\_bbbb|bv\_vvvV|vV|0b

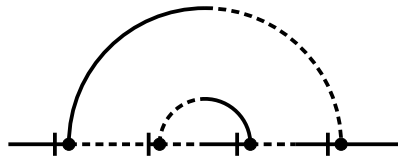


Figure 410:  
0B\_vV\_bbvv|vB\_vvbb|vB|0b

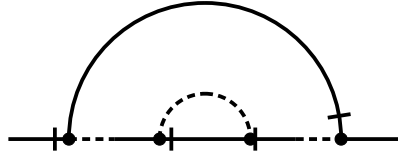


Figure 411:  
0B\_vb\_bbbB|Bb\_vvvv|Bv|0b

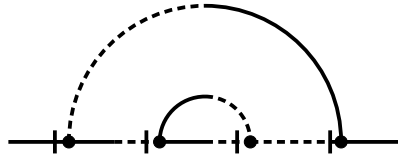


Figure 412:  
0B\_bV\_vvbb|bV\_bbvv|vV|0b

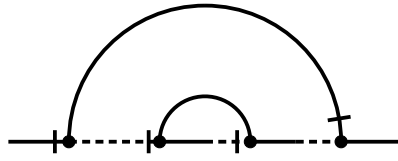


Figure 413:  
0B\_vV\_bbbB|bV\_bbbb|bv|0b

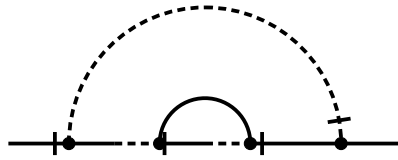


Figure 414:  
0B\_bv\_vvvV|Bv\_bbbb|Bb|0b

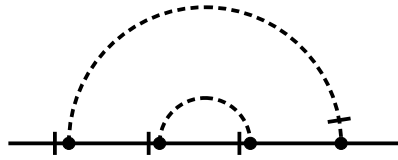


Figure 415:  
0B\_bB\_vvvV|bB\_vvvv|bb|0b

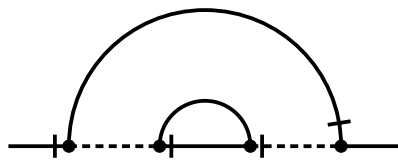


Figure 416:  
0B\_vv\_bbbB|Bb\_bbbb|Vv|0b

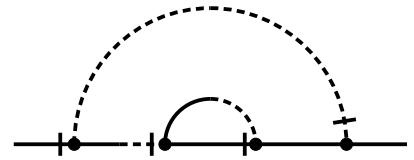


Figure 417:  
0B\_bV\_vvvV|bB\_bbvv|bb|0b

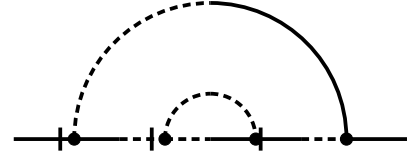


Figure 418:  
0B\_bV\_vvbb|vb\_vvvv|Bv|0b

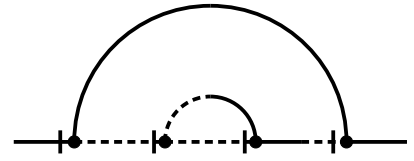


Figure 419:  
0B\_vV\_bbbb|vV\_vvbb|bV|0b

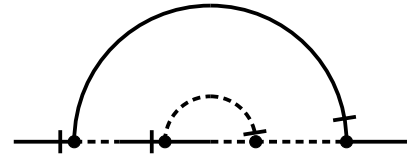


Figure 420:  
0B\_vB\_bbbB|bv\_vvvV|vv|0b

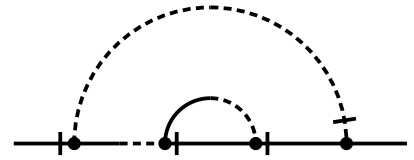


Figure 421:  
0B\_bv\_vvvV|Bb\_bbvv|Bb|0b

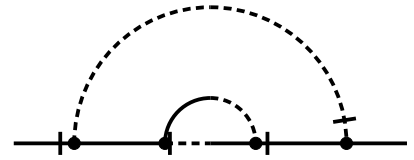


Figure 422:  
0B\_bb\_vvvV|Vb\_bbvv|Bb|0b

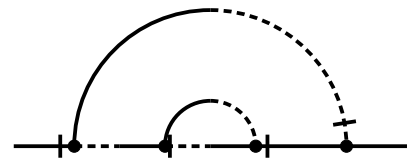


Figure 423:  
0B\_vb\_bbvV|Vb\_bbvv|Bb|0b

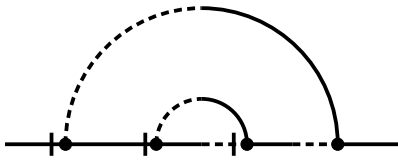


Figure 424:  
0B\_bB\_vvbb|bV\_vvbb|bv|0b

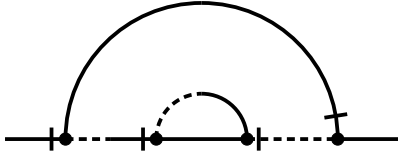


Figure 425:  
0B\_vB\_bbbB|bb\_vvbb|Vv|0b

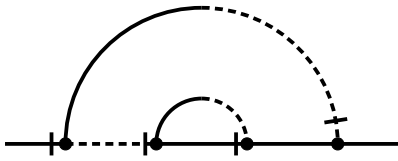


Figure 426:  
0B\_vV\_bbvV|bB\_bbvv|bb|0b

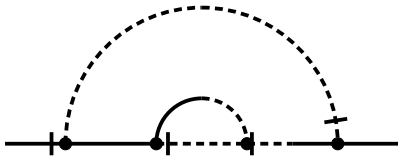


Figure 427:  
0B\_bb\_vvvV|Vv\_bbvv|Vb|0b

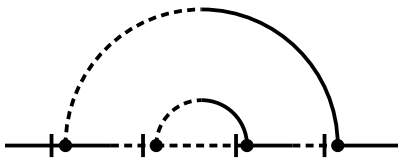


Figure 428:  
0B\_bV\_vvbb|vV\_vvbb|bV|0b

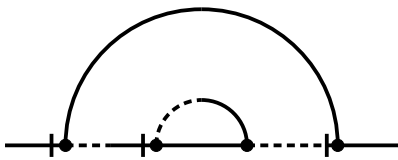


Figure 429:  
0B\_vB\_bbbb|bb\_vvbb|vV|0b

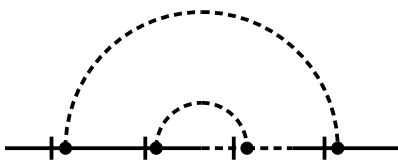


Figure 430:  
0B\_bB\_vvvv|bV\_vvvv|vB|0b

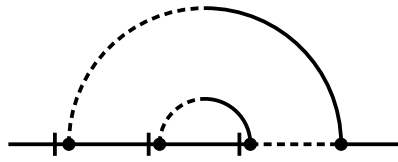


Figure 431:  
0B\_bB\_vvbb|bB\_vvbb|vv|0b

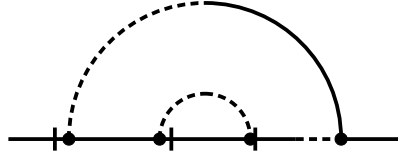


Figure 432:  
0B\_bb\_vvbb|Bb\_vvvv|Bv|0b

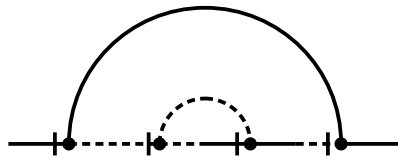


Figure 433:  
0B\_vV\_bbbb|vB\_vvvv|bV|0b

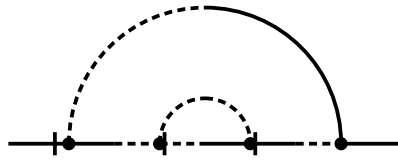


Figure 434:  
0B\_bv\_vvbb|Vb\_vvvv|Bv|0b

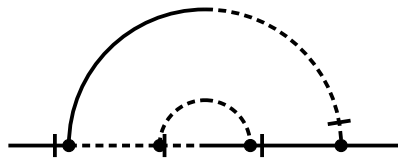


Figure 435:  
0B\_vv\_bbvV|Vb\_vvvv|Bb|0b

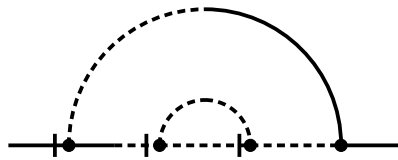


Figure 436:  
0B\_bV\_vvbb|vV\_vvvv|vv|0b

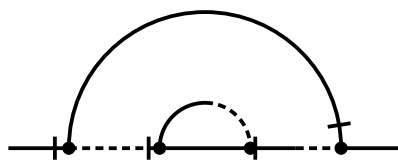


Figure 437:  
0B\_vV\_bbbB|bb\_bbvv|Bv|0b

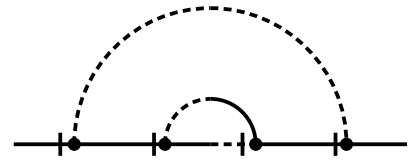


Figure 438:  
0B\_bB\_vvvv|bV\_vvbb|bB|0b

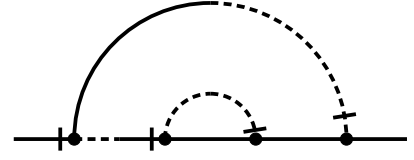


Figure 439:  
0B\_vB\_bbvV|bb\_vvvV|bb|0b

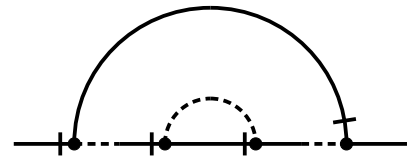


Figure 440:  
0B\_vB\_bbbB|bB\_vvvv|bv|0b

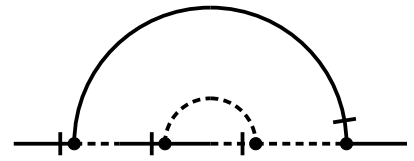


Figure 441:  
0B\_vB\_bbbB|bV\_vvvv|vv|0b

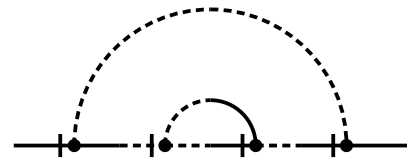


Figure 442:  
0B\_bV\_vvvv|vB\_vvbb|vB|0b

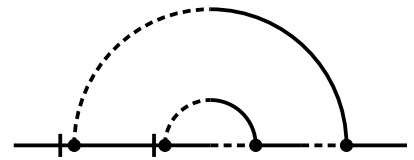


Figure 443:  
0B\_bB\_vvbb|bv\_vvbb|bv|0b

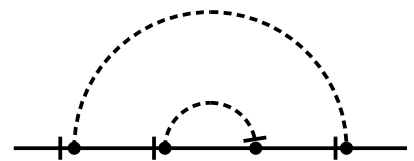


Figure 444:  
0B\_bB\_vvvv|bb\_vvvV|bB|0b



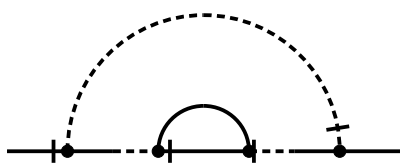


Figure 445:  
0B\_bv\_vvvV|Bb\_bbbb|Vb|0b

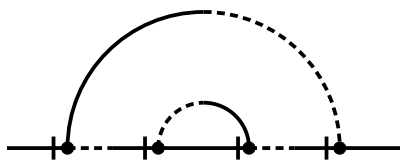


Figure 446:  
0B\_vB\_bbbv|bB\_vvbb|vB|0b

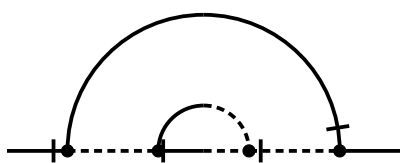


Figure 447:  
0B\_vv\_bbbB|Bv\_bbbv|Vv|0b

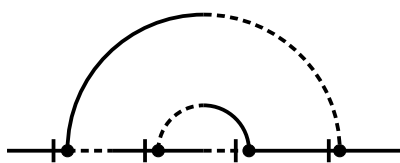


Figure 448:  
0B\_vB\_bbbv|bV\_vvbb|bB|0b

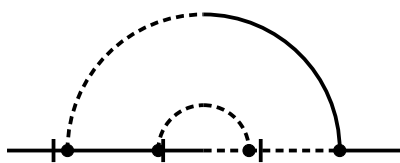


Figure 449:  
0B\_bb\_vvbb|Bv\_vvvv|Vv|0b

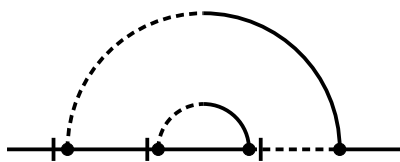


Figure 450:  
0B\_bB\_vvbb|bb\_vvbb|Vv|0b

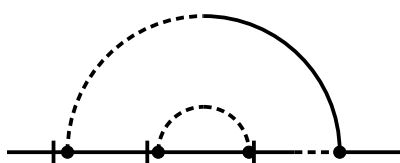


Figure 451:  
0B\_bB\_vvbb|bb\_vvvv|Bv|0b

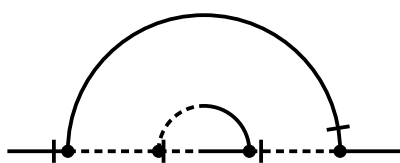


Figure 452:  
0B\_vv\_bbbB|Vb\_vvbb|Vv|0b

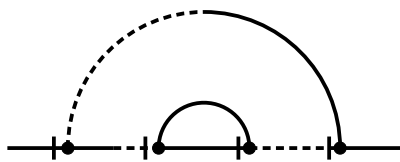


Figure 453:  
0B\_bV\_vvbb|bB\_bbbb|vV|0b

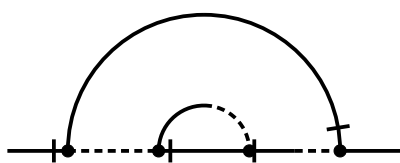


Figure 454:  
0B\_vv\_bbbB|Bb\_bbbv|Bv|0b

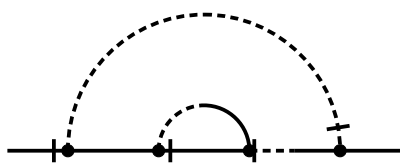


Figure 455:  
0B\_bb\_vvvV|Bb\_vvbb|Vb|0b

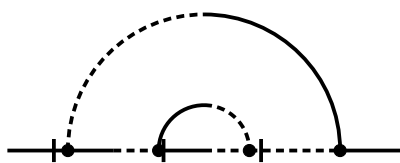


Figure 456:  
0B\_bv\_vvbb|Bv\_bbbv|Vv|0b

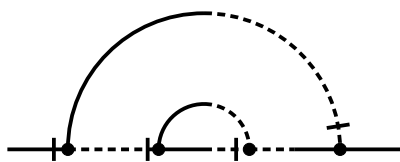


Figure 457:  
0B\_vV\_bbbV|bV\_bbbv|vb|0b

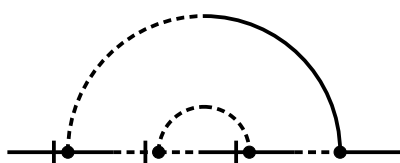


Figure 458:  
0B\_bV\_vvbb|vB\_vvvv|bv|0b

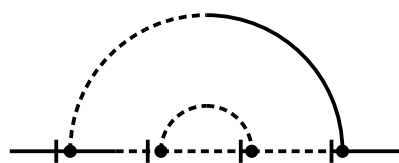


Figure 459:  
0B\_bV\_vvbb|vV\_vvvv|vV|0b

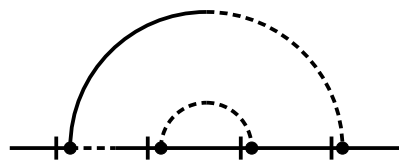


Figure 460:  
0B\_vB\_bbbv|bB\_vvvv|bB|0b

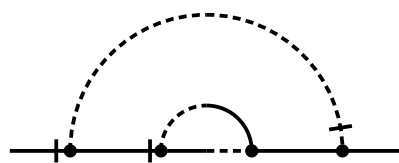


Figure 461:  
0B\_bB\_vvvV|bv\_vvbb|bb|0b

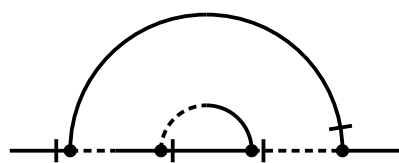


Figure 462:  
0B\_vb\_bbbB|Bb\_vvbb|Vv|0b

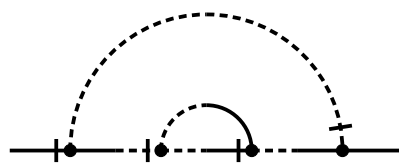


Figure 463:  
0B\_bV\_vvvV|vB\_vvbb|vb|0b

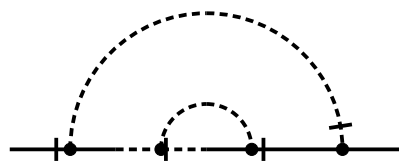


Figure 464:  
0B\_bv\_vvvV|Vb\_vvvv|Bb|0b

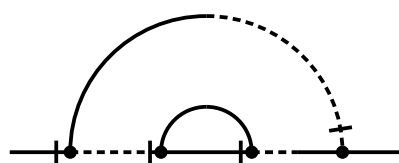


Figure 465:  
0B\_vV\_bbbV|bB\_bbbb|vb|0b

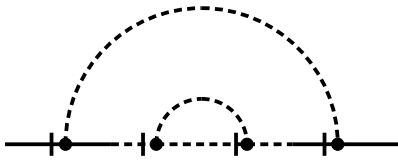


Figure 466:  
0B\_bV\_vvvv|vV\_vvvv|vB|0b

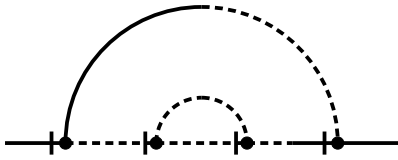


Figure 467:  
0B\_vV\_bbbv|vV\_vvvv|vB|0b

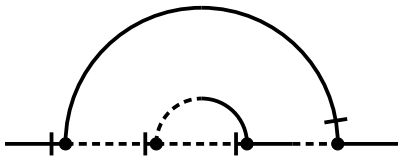


Figure 468:  
0B\_vV\_bbbB|vV\_vvbb|bv|0b

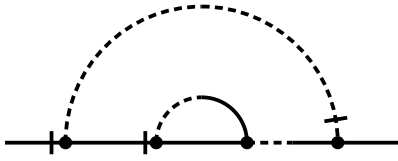


Figure 469:  
0B\_bB\_vvvV|bb\_vvbb|vb|0b

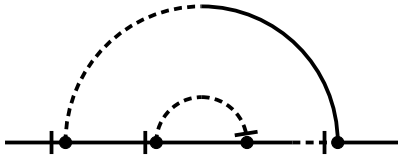


Figure 470:  
0B\_bB\_vvbb|bb\_vvvV|bV|0b

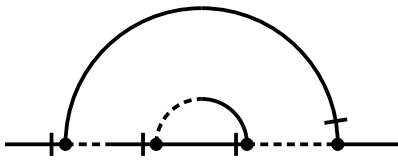


Figure 471:  
0B\_vB\_bbbB|bB\_vvbb|vv|0b

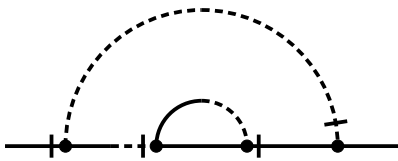


Figure 472:  
0B\_bV\_vvvV|bb\_bbbv|Bb|0b

## 2.2 Diagrams with symmetry factor equal to 1/2

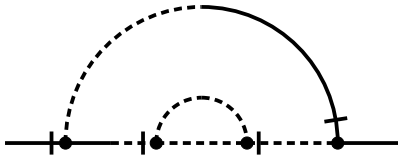


Figure 473:  
0B\_bV\_vvbB|vv\_vvvv|Vv|0b

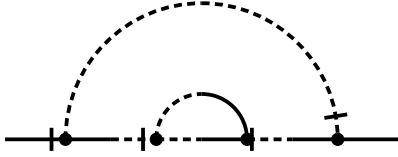


Figure 474:  
0B\_bV\_vvvV|vb\_vvbb|Vb|0b

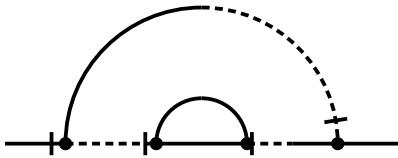


Figure 475:  
0B\_vV\_bbvV|bb\_bbbb|Vb|0b

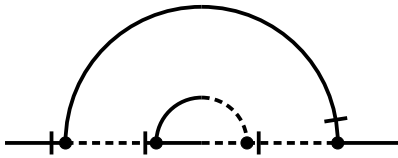


Figure 476:  
0B\_vV\_bbbbB|bv\_bbvV|Vv|0b

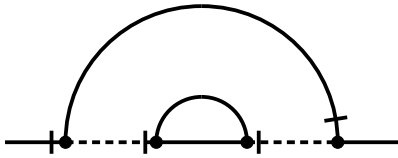


Figure 477:  
0B\_vV\_bbbbB|bb\_bbbb|Vv|0b

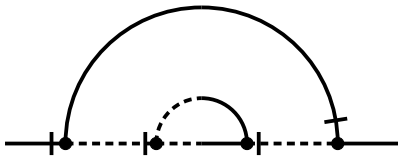


Figure 478:  
0B\_vV\_bbbbB|vb\_vvbb|Vv|0b

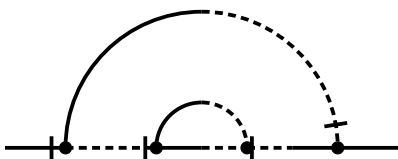


Figure 479:  
0B\_vV\_bbvV|bv\_bbvV|Vb|0b

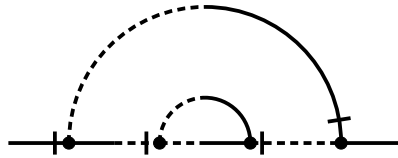


Figure 480:  
0B\_bV\_vvbB|vb\_vvbb|Vv|0b

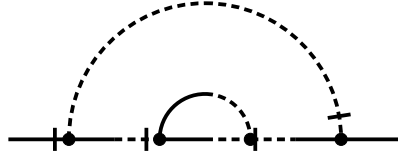


Figure 481:  
0B\_bV\_vvvV|bv\_bbvV|Vb|0b

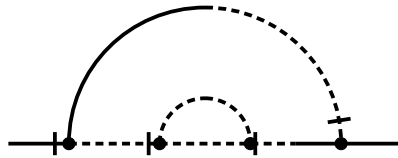


Figure 482:  
0B\_vV\_bbvV|vv\_vvvv|Vb|0b

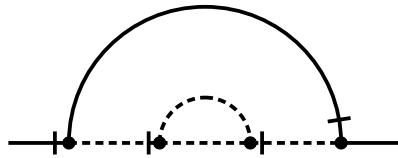


Figure 483:  
0B\_vV\_bbbbB|vv\_vvvv|Vv|0b

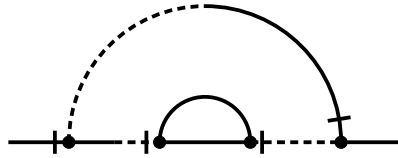


Figure 484:  
0B\_bV\_vvbB|bb\_bbbb|Vv|0b

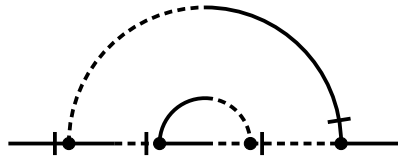


Figure 485:  
0B\_bV\_vvbB|bv\_bbvV|Vv|0b

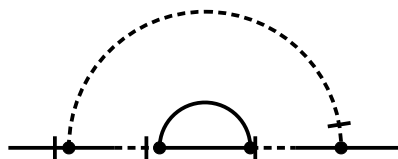


Figure 486:  
0B\_bV\_vvvV|bb\_bbbb|Vb|0b

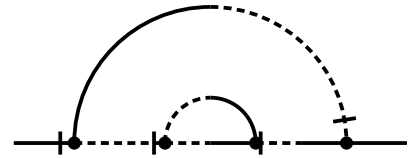


Figure 487:  
0B\_vV\_bbvV|vb\_vvbb|Vb|0b

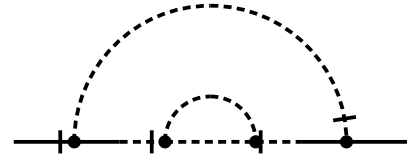


Figure 488:  
0B\_bV\_vvvV|vv\_vvvv|Vb|0b