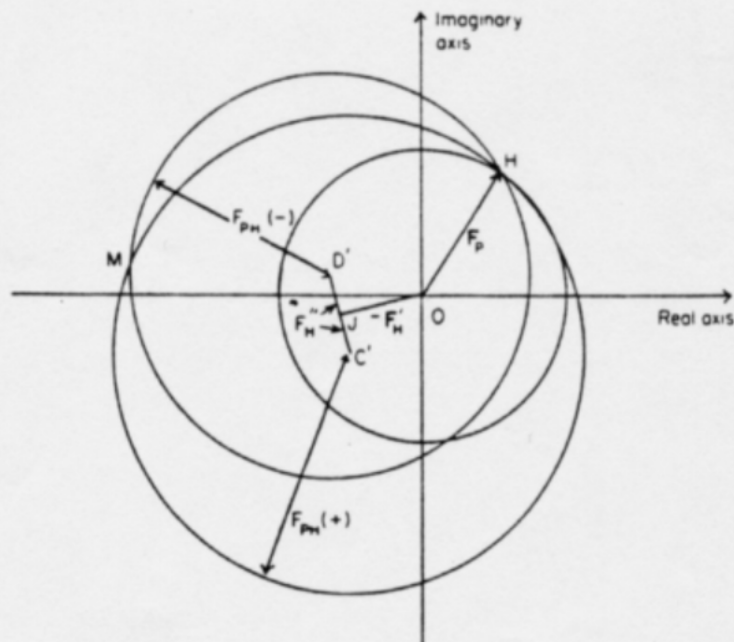


Harker diagram to illustrate phase determination using anomalous scattering. The diagram is constructed in the same way as that for isomorphous replacement (Fig. 6.5). Circles of radii  $F_{PH}(+)$  and  $F_{PH}(-)$  are drawn with their centres at  $-(F_H + F_H^r)$  and  $-(F_H - F_H^r)$ . The two points of intersection indicate the two possible vectors for  $F_{PH}$ , i.e.  $JH$  and  $JM$ . Two possibilities for  $F_P$  are given as  $OH$  and  $OM$ .



Harker diagram to illustrate phase determination using anomalous scattering (Fig. 7.7) combined with isomorphous replacement for situation shown in Fig. 7.6. The intersection of the three circles of radii  $F_p$ ,  $F_{PH}(+)$  and  $F_{PH}(-)$  at  $H$  indicates that  $F_p$  is given by the vector  $OH$ .