The approach is a modification of that in Soergel's initial paper, [S1], cf. Dmytro's lectures at [O]. For some results in Section 2, see [S2].

References

[O] Learning seminar on category O, https://ivanloseu.github.io/O.html.

[S1] W. Soergel, *Kategorie O, perverse Garben und Moduln über den Koinvarianten zur Weylgruppe*. J. Amer. Math. Soc. 3 (1990), no. 2, 421–445.

[S2] W. Soergel, *The combinatorics of Harish-Chandra bimodules*. J. Reine Angew. Math. 429 (1992), 49–74.